

STATEWIDE COORDINATION OPPORTUNITY PLAN (SCOP)

1. Introduction

For years, transit systems in Louisiana have sought to improve efficiency and effectiveness of their services. Concerns over funding availability have made these efforts even more important in recent years. Coordination among service providers is one method that can be used to enhance service efficiency and effectiveness, as well as increase service availability to different ridership groups.

This study has two distinct goals. The first is to assess transit need and demand in Louisiana. Both urban and rural areas are examined in this report, but transit needs are particularly keen in the state's rural areas. This knowledge is necessary particularly in planning for the distribution of resources where they will most effectively be used. The second goal is to develop a plan for the implementation of coordination strategies on the state and local levels.

The Louisiana Department of Transportation and Development (DOTD), with funding from the U. S. Department of Transportation, Federal Transit Administration (FTA), commissioned the Statewide Coordination Opportunity Plan (SCOP) to address these goals. The results of this project will be of benefit to the DOTD, other state agencies, transit systems, service providers, local governments, and transit users. This report will be especially useful in the development of new rural public transportation services in areas not currently served and to other state agencies in need of transportation to meet their program goals through contractual agreements with existing providers.

1.1. Why Coordinate?

There are two primary reasons to coordinate. The first is that coordination is required by funding sources. The second is that, as a management strategy, coordination offers significant benefits to local transportation providers.

The Federal Transit Administration (FTA) has mandated the coordination of transportation resources to the maximum extent possible. In its ongoing effort to achieve this coordination of resources, the Public Transportation Section of the Louisiana Department of Transportation and Development, through a strategic planning session, developed goals for statewide coordination and a realistic approach for implementation.

Several goals were developed. These goals are:

- Invest in a system that is here today and here tomorrow;
- Insure financial stability for public transportation providers;
- Increase the level of geographic equity throughout the state;
- Provide good quality service which is responsive to passengers and clients;
- and
- Develop an identifiable statewide transit system.

Additionally, as the Chair of the Inter-Agency Transportation Coordination Committee (IATCC), DOTD is working with other state agencies to maximize the potential for a coordinated statewide transportation system. The Inter-Agency Transportation Coordination Committee (IATCC) was established under an Executive Order of Governor Mike Foster (MJF96-18) to obtain the maximum use of transportation resources and increase the cost efficiency of providing transportation services by coordinating and consolidating administration, planning and funding of providing public and specialized transportation services (Applied Technology Research Corporation, 1998b).

The IATCC has affirmed that the use of state administered, public funds for transportation should be managed as an investment rather than an expenditure for convenience and that collective, inter-agency impact assessments are needed to determine how individual program expenditure decisions impact the state as a whole. The development of a comprehensive transportation delivery system in Louisiana is dependent on state administered funds being coordinated to both build and maintain the system. Although federal funds administered by state agencies are allocated by program, the state can coordinate the expenditure in a way to obtain optimal benefit (Applied Technology Research Corporation, 1998b).

Coordination will be a tool for meeting present and future requirements of federal mandates. As these requirements become more demanding financially and administratively, the incentive to share the burdens exacted by these requirements is further intensified.

Many new federal programs provide funding incentives for coordination. FTA's Job Access/Reverse Commute Grant program is one such program. Funds from other federal sources such as Welfare to Work and Find Work can be used to match grant money received under this program. State agencies are encouraged to work together to achieve program goals and establish a coordinated administrative framework to manage the program.

1.2. Current Status of Rural Transportation

The Federal Transit Administration (FTA) uses a geographic criteria for distributing formula operating grants – to urbanized and nonurbanized areas. Urbanized areas are defined by the U. S. Census to have a central city of at least 50,000 population and contiguous developed area. Nonurbanized areas include rural areas and small urban places below 50,000 population. Louisiana has 30 non-urbanized transportation providers funded through FTA's Section 5311, Rural Public Transportation program. These providers are social service agencies operating under a subcontract to a local public entity.

The majority of these nonurbanized agencies only serve persons located in their respective parishes. Some agencies provide limited transportation services to residents in adjacent parishes although this is not the norm. Based on our research

there is no connected transportation service offered between rural public agencies or between rural and urban public agencies. In other words, there is much duplication of service routes when crossing parishes to deliver passengers to urbanized destinations.

The Section 5311 program is administered by the DOTD through contractual agreements with local public entities. This requirement is a state policy that was implemented to safeguard the financial accountability of the program. The local public entity in turn contracts with the transportation provider which is generally a social service agency. The match for the Section 5311 program is primarily provided by the social service agency and/or local sources. These agencies also use eligible federal funds for a portion of their operating match. These funds include: Governor's Office of Elderly Affairs (Title IIIB), Community Services Block Grant (CSBG), Find Work, and Welfare to Work.

Because the match for the Section 5311 program is generated through local initiative and is dependent on an existing local entity and the social service agency's willingness to participate in the program, there are different programs in different parts of the state. This has resulted in geographic inequity of transportation resources in Louisiana, some parishes have no rural public transportation.

1.3. Current Status of Public Transportation in Urbanized Areas

Urbanized public transportation is provided in the urbanized portions of Rapides, East Baton Rouge, Terrebonne, Lafayette, Calcasieu, Ouachita, Orleans, St. Bernard, and Jefferson Parishes. There is no cooperative service between the urbanized and non-urbanized public systems at this time.

Public transit operators can be a transportation resource for social service agencies and in most urban areas are providing some transportation to agency clients. Typically this is done through the purchase of transit passes by the social service agencies. The passes are then distributed to clients to facilitate transportation to the service agency facility. Use of the public transportation provider by the social service agencies meet a portion of the transportation need by these agencies and is in effect a coordination of services. The coverage of bus routes and the ability of clients to use the public system without assistance limit use of the public transit system, however.

In recent years public transit operators have begun to provide more special transportation services to the public as a result of legislative and regulatory requirements (Americans with Disabilities Act). This has expanded the number of citizens who can potentially use public transit. The use of public buses that can accommodate disabled clients enables more use of the fixed route systems. Development of special transportation or paratransit services has been the primary response to the need to service clients who cannot access fixed route services.

Special transportation services have been initiated by all urbanized area public

transportation systems. These are typically demand response systems which use vans or small bus type vehicles. Clients are those who are disabled and cannot use the fixed route system. They typically need driver assistance to access the vehicle. Clients have to submit an application to the transit agency to qualify for the special transportation programs. The application establishes that the client is disabled and needs special transportation services. Once approved, the client has to call the transit agency to schedule service, usually 24 hours in advance. In general the special transportation services provided by the public transit systems are operating at capacity and cannot meet the demand for this service.

To determine what type of transit coordination efforts are ongoing or planned in urbanized areas; interviews were conducted with the transit operators and the planning entities that provide planning support to the transit operators. The urbanized areas contacted were Alexandria, Baton Rouge, Houma, Lafayette, Lake Charles, Monroe, New Orleans, and Shreveport. The Slidell urbanized area does not presently have a public transit system. In each urbanized area the planning agency is the metropolitan planning organization for the urbanized area.

2. Comparative Analysis

Background research and data collection efforts were done in preparation for developing the Statewide Coordination Opportunity Plan (SCOP). Preparatory activities included: a review of studies from other states, a review of studies previously completed in Louisiana, a compilation of transit planning in urbanized areas, an assessment of transit need and demand, an appraisal of perceived transit needs, an inventory of existing transportation resources, and an analysis of transit service area maps.

2.1. Review of Studies From Other States and Louisiana

Transit studies from other states and studies previously completed in Louisiana provide guidance in choosing a methodology for this assessment and will be utilized to validate our approach and application. Our review of other states included: North Carolina, Texas, and Idaho. Idaho was added to this review because of its recently completed needs assessment and inventory, entitled “Movin’ Idaho” which is very similar in scope to the work for this project.

The studies previously completed in Louisiana provide historical information regarding previous recommendations and accomplishments. Recommendations have been re-examined for application under current conditions. If still viable, they have been included in the final recommendations for this assessment.

Review of:

“North Carolina Human Service Transportation Needs Assessment”

Published by: Human Service Transportation Council, North Carolina Department of Transportation, Public Transportation Division, July 1996

Authored by: SG Associates, Inc.; Urbitran Associates, Inc.; and C. M. Research, Inc.

This study had three objectives:

- 1) to determine the number and type of human service clients that are not receiving services due to a lack of available transportation,
- 2) to provide demand estimates for general public services, and
- 3) to make recommendations on how to best meet transportation needs.

The study methodology began with a demographic analysis of all counties in North Carolina based on 1990 Census data. Each county was classified into groupings based on population density and a derived transportation disadvantaged population index. The derived transportation disadvantaged population index for each county was calculated using the sum of percent population over 60, percent population below poverty, and percent population 16-64 with mobility limitations. Using the derived transportation disadvantaged population index, counties were grouped into three ranges. The purpose of using this method was to form data groupings that were internally similar. Six groupings were established:

- 1) low transportation disadvantaged index - low density,
- 2) low transportation disadvantaged index - medium density,
- 3) low transportation disadvantaged index - high density,
- 4) medium transportation disadvantaged index - low density,
- 5) medium transportation disadvantaged index - medium density, and
- 6) high transportation disadvantaged index - low density.

The majority of counties analyzed fell into groups 4 and 6. Two counties from each of these groups was selected for detailed study. Additionally, one county was selected from each of the other four groupings.

Detailed surveys of services in each of the ten selected counties were collected. Based on the existing conditions and the service to demand relationships found to exist in the ten selected counties, estimates of served and unserved transportation demand were projected for each of the one hundred counties in North Carolina. The actions developed for the ten selected counties were similarly extrapolated to the counties statewide based on the population density/transportation need index relationship between the ten selected representative counties and groupings of all the counties in the state.

The authors of this study acknowledged that the methodology used has its drawbacks. The set of ten selected counties does not represent the diversity and uniqueness found in all 100 counties in North Carolina. However, the authors maintain that the methodology employed allowed a diverse set of counties to be

studied in depth and permitted a reasonable extrapolation of findings and actions to be made to similar counties statewide at a fraction of the budget that would have been required to study all one hundred counties in detail.

Review of:

“Improving Transit Coordination in Texas”

Published by: Texas Department of Transportation, November, 1994

Authored by: Patricia A. Turner and Katherine F. Turnbull

This report examines coordination strategies utilized by transit providers across the nation and in Texas; identifies which strategies may be appropriate for TxDOT and transit providers in Texas to pursue; identifies issues and barriers commonly associated with implementing these strategies; and examines methods to overcome these barriers. The report also identifies various approaches available to implement selected coordination strategies and includes guidelines that can assist transit providers with selecting, evaluating, implementing, and monitoring various coordination strategies.

A four-step coordination process is outlined in this report to help interested groups evaluate and select potential strategies to coordinate vehicle operations, maintenance, and administrative functions. The four steps are: 1) determining the feasibility of a coordination effort, 2) assessing the level of local interest, 3) identifying service deficiencies and needs, and 4) analyzing the potential for coordination.

Checklists were provided in the report to assist decisionmakers in choosing between a pure transportation lead agency, existing human services lead agency, a pure or partial brokerage, and an administrative agency model with a lead agency or with a brokerage. Guidelines are included for developing an ongoing monitoring and evaluation program.

Finally the study identifies activities that TxDOT, other state agencies, transit providers, and communities could undertake to help promote and foster coordination efforts. These activities include: providing start-up funding for coordination, sponsoring demonstration projects, enhancing policy guidelines, promoting standardization, supporting education and training programs, enhancing communication, and supporting shared use of facilities.

Of particular interest in this study was the information regarding state level coordination in Texas. To improve coordination among human services agency transportation providers, the Texas legislature created the Governor’s Office of Client Transportation Services (OCTS) in 1991. The OCTS is responsible for collecting data on health and human services client transportation needs, services, and expenditures, and for developing a statewide coordination plan. Some of the office’s goals include: developing a statewide client transportation network to involve clients, providers, and agencies in developing coordination plans; fostering agency collaboration by coordinating planning and contracting for services, developing standardized reporting requirements, and supporting resource sharing and joint problem solving; and completing a statewide assessment of transportation needs and creating an information clearinghouse.

The OCTS reports findings and recommendations to the Health and Human Services Commission (HSSC) on September 1st of even numbered years. In 1994, the OCTS was instrumental in the formation of the Agency Transportation Coordination Council (ATCC). The ATCC is made up of representatives from ten state agencies including TxDOT. The goal of the ATCC is to identify and address state and federal barriers to coordination and to develop proposals to coordinate agency transportation services, programs, and resources.

In its first report the ATCC presented the following recommendations: 1) use the OCTS as the statewide clearinghouse for information on transportation conferences and training events; 2) evaluate current transportation monitoring requirements in order to develop simple, uniform monitoring instruments that would meet the needs of all agencies which require monitoring of purchased transportation; 3) investigate and remove the barriers to development of a common agency operational report for programs which purchase transportation services; 4) simplify existing agency transportation rules by using references to the most fundamental and widely applicable rules published; 5) negotiate for waivers or exceptions to federal transportation rules if necessary to improve transportation coordination; 6) develop a forum for voluntary interagency preliminary review of proposed transportation related rules; 7) identify the components of contracted transportation rates and investigate the possibility of adoption of uniform rate components (not uniform rates) by agencies which contract transportation; 8) monitor and evaluate the TxDOT regionalization of the Section 16(b)(2) grant program for capital expenditures for elderly and disabled transportation; and 9) convene at least four meetings of local transportation stakeholders to share, evaluate, and develop models of regional transportation coordination.

A proposed Statewide Action Plan was developed by the ATCC. Five strategies were recommended in this plan. They were: 1) develop an efficient transportation service delivery infrastructure which will be responsive to client needs; 2) continue to build on the public transportation system and to develop public-private partnerships to meet all client needs; 3) evaluate strategies for allocation of state-administered client transportation funds to optimize available funding and maximize service delivery; 4) ensure continuous improvement of state planning and management, including vigorous stakeholder participation; and 5) ensure local control and flexibility, especially for regional variations.

Review of:

“Movin’ Idaho - Idaho Public Transportation Plan”

Published and authored by: Idaho Transportation Department - Division of Public Transportation

The Idaho plan has a sub-state regional focus. The plan was conceived to satisfy the requirements set forth under Section 40-514, Idaho Code, which changed the image of transit in Idaho, bringing it to the forefront of statewide modal options. This section of Idaho Code created a Public Transportation Advisory Council (PTAC), as well as six regional public transportation advisory committees (RPTAC), to coordinate planning of public funds expended on transportation services in Idaho.

The Council, in cooperation with the Idaho Transportation Department, is directed by the Idaho Code to institute a needs-assessment plan; develop a comprehensive public transportation plan for the state and each region; provide assistance to operators of local and regional transportation systems that are consistent with program objectives; maintain a state commitment to improve public transportation for currently served and unserved areas; and increase the efficiency of over-all public transportation services.

The plan then examined the various mandates – “driving forces” required for planning. This was followed by a discussion of issues facing public transportation and challenges to providing various services. Funding was identified as the greatest challenge: uncertainty regarding continuation of federal funding at current levels and the lack of a permanent state funding program to support public transportation. Add to this the issue of regulatory and procedural boundaries which prevent the development of a coordinated, statewide public transportation program and in some cases has resulted in the duplication of services and the inefficient use of current funding.

The plan set forth the missions, goals and objectives for the state. The goals were established as five-year goals. Following this section there was a general discussion regarding demographics including the following “transit dependent” statistics: population, urban and rural households, vehicle availability, youth and elderly populations, and journey to work.

All funds administered by the Public Transportation Division were documented and an explanation of each program’s unique purpose described. These included: Federal Transit Administration funding, the Statewide Public Transportation Improvement Program, state funding, coordination, and intermodal connections.

The next section was the Availability and Resource Assessment. This was a statewide assessment of public transportation availability, a resource assessment, and a description of the types of service provided. This section was very general; detailed descriptions were included by region.

Finally, as a part of the statewide focus, the costs of transportation were reviewed. The private-user costs are separated into two categories - 1) purchased intercity and intracity transportation, and 2) vehicle operating expenses. Additionally, other costs are identified in nine transportation “externalities” which are a result of the use of automobiles:

- accident rates
- congestion
- parking costs
- air pollution
- water pollution
- energy consumption
- land-use impacts
- noise, and
- aesthetics

Plans were developed for each of the six designated regions of Idaho. Generally each regional committee developed these plans with assistance from the Idaho Department of Transportation. The components of the plans differ somewhat but for the most part follow the same format. These regional plans include:

- 1) the public transportation planning process, the history and a general description of the region;
- 2) a regional public transportation needs assessment:
 - census demographics,
 - student population,
 - rural quality,
 - air pollution,
 - downtown congestion, parking, and traffic volumes,
 - total cost of transportation services,
 - tourism,
 - population growth,
 - public surveys - regarding needs and wants,
 - community leaders survey,
 - survey of urban bus system ridership,
 - conclusions, and
 - obstacles to satisfying needs;
- 3) an assessment of current resources:
 - inventory of current plans and references to public transportation,
 - the significant points in the plans received, and
 - an inventory of financial resources;
- 4) the regional plan;
- 5) public transit goals and objectives for the region; and
- 6) appendices for the regional plan.

Each region in the Idaho Public Transportation Plan is similarly evaluated.

Review of:

“Statewide Assessment of Transportation Needs in
Nonurbanized Areas, Louisiana”

Published by: Louisiana Department of Transportation and Development

Authored by: Sunbelt Research Corporation, May 1981

In 1981, the Louisiana Department of Transportation and Development, in conjunction with the Federal Highway Administration, had just begun the development, implementation, and administration of the Urban Mass Transportation Administration's (UMTA's) Section 18 program which provided capital and operating funds to public entities in nonurbanized areas. This report was prepared to assist the department in assessing the need for public transportation in nonurbanized areas, determine transit services available, and to estimate the net required service to meet the expected need.

An inventory of 275 transportation service providers was identified in non-urbanized areas. These providers were categorized into five groups: taxi operators, Community Action Agencies, Councils on Aging, Department of Health and Human Resources (DHHR) agencies, and others. 36.4% (100) of all providers identified in nonurbanized areas were taxi operators; 19.6% (54) were Councils on Aging; and 13.5% (37) were Community Action Agencies.

As a part of the inventory of transportation providers, fleet composition data were collected by parish. From these data, the availability of seats in each parish was calculated. According to the inventory there were over 5,708 vehicle seats.

Also as a part of the inventory, transportation providers were categorized by type of service: fixed route, paratransit service – demand response and planned demand, emergency transport demand responsive, and combined demand responsive and planned demand; ownership status was determined – government body, human service agency, private for-profit, and private non-profit; and wheelchair spaces were catalogued by parish and vehicle type.

A methodology was formulated in this needs assessment to quantitatively assess the finite magnitude of potential transit demand in nonurbanized areas. It was developed within the parameters of given assumptions and the best available data. The methodology employed two variables – households by auto availability and ridership rates for households by size of place. These were multiplied by a transit patronage multiplier based on an average of .0322. This transit patronage multiplier was calculated by dividing the annual transit patronage by the total annual auto trips. The multiplier was a derivation of percent transit ridership modeled on urbanized areas (Lafayette, Lake Charles, and Monroe) in Louisiana of 50,000 to 99,999 population. From this calculation, the daily transit activity in a given place was derived.

Due to the lack of nonurbanized transit data and the availability of transit ridership data in urbanized areas of Louisiana, projection rates for nonurbanized ridership

figures were derived from select existing urbanized transit systems data. A comparative assessment was made utilizing information available from three small urbanized areas in Louisiana: Monroe, Lake Charles, and Lafayette. The idea was to determine transit usage in these urbanized areas and relate the values to nonurbanized places. The comparative assessment was made by aggregating one, two, three plus and zero auto households and aggregating the 1978 annual transit patronage from the three cities. The same calculations were made using five out-of-state urbanized areas with 1970 populations between 50,000 and 99,999. Using the same procedure used on the Louisiana cities, the transit patronage multiplier was 0.0313 – very close to that calculated for the Louisiana systems. The assumption was made that travel patterns and activity in small urbanized areas are applicable to those in nonurbanized areas.

Since all households in nonurbanized areas were used in the calculations, an arbitrary assumption was made as to the distribution of transit trips by household type. It was assumed that transit trips would be made by zero auto and one auto households. A transit trip split was then made based on the probable likelihood of transit activity. This split allocates 80% of the potential transit trips to zero auto households and 20% of the trips to one auto households. A set of transit trip multipliers was developed utilizing these variables. The average multiplier for zero auto and one auto households was derived by dividing the expected transit trips by the total daily auto vehicle trip activity. This procedure eliminates the calculation of auto trip activity generated by households with two or more autos since they are excluded from the transit potential population.

Four sets of multipliers were derived to cover all places and areas of the state by aggregating households in four groups based on the population of the place and its incorporated status. These four groups included:

- 1) Incorporated places of 25,000 – 49,999 population,
- 2) Incorporated places of 5,000 – 24,999 population,
- 3) Incorporated places of 2,500 – 4,999 population,
- 4) Incorporated places of less than 2,500 population and all unincorporated places.

Households for places and areas within each size of place category were aggregated and the expected trip multipliers were derived for each size of place category using the previously described method.

The calculation of the expected number of transit trips involved four steps:

- 1) Segregation of enumeration district (ED) data by size of place (1970 U. S. Census).
- 2) Calculation of the expected number of auto trips by household auto availability for each size of place/ED category using the trip rate multipliers.
- 3) Calculate the expected number of transit trips by applying the multipliers to the computed auto trips in step 2.

- 4) Aggregate the expected number of transit trips derived in step 3 to arrive at the expected number of transit trips for a given parish.

The inventory of the existing fleet included vehicles and passenger seats. In order to determine the magnitude of need for additional services it was necessary to establish a common factor for the potential transit demand and the availability of existing services. Seats available was determined to best serve this purpose. Potential transit trips were converted to a value referred to as “seat equivalents”. This value represents the seat equivalents necessary to accommodate the given number of potential transit trips. The value for gross seat equivalents is adjusted by the seats available as determined in the inventory. The net value is the seat requirements needed to meet the calculated potential transit demand.

The model for calculating this potential transit demand was formulated to assist transit operators in the establishment and refinement of transit services to the general public. The ultimate objective was to refine the model to the stage where precise values could be generated with respect to specific transit service areas. This “ultimate” model would require data which at the time of this report was not readily available. The model was a first approximation which incorporated factors associated with transit operations in nonurbanized areas.

This report identified two obstacles to coordination of transportation services:

- institutional mismatch - a separation between major operations funding and primary capitalization and technical expertise.
- user restrictions - pertain to both the provider and recipient of transportation services. These regulatory restrictions were identified as the most formidable obstacles in the way of implementing an efficient transportation service delivery program, especially in nonurbanized areas. The primary problem is the development of singular purpose or restrictive purpose transportation which provide funds for the eligible recipients of social and health service programs.

Recommendations were made to address the two issues of institutional mismatch and user restrictions through interagency coordination.

This coordination effort requires that certain fundamental objectives be recognized and agreed upon. With regards to the transportation coordination effort, the primary objective was:

To establish and maintain an efficient and effective transportation delivery system to serve the nonurbanized areas of Louisiana.

The second objective pertained to improving service effectiveness through the coordination of funding:

To coordinate the expenditure of public funds for transportation capital

and operating assistance.

The third objective related to the establishment of an organizational structure within which transportation coordination will be maintained:

To establish a mutually acceptable organization structure to maximize available transportation service resources for the benefit of the transportation service clientele.

Several options were proposed to create an “acceptable” coordination organization structure for state department level transportation service coordination:

- 1) departmental autonomy,
- 2) single lead department, and
- 3) interdepartmental transportation committee.

The first option was the existing condition. Under this option, each department proceeded independent of other departments. This resulted in an administratively unacceptable procedure which could hinder the development of an effective and efficient delivery system.

The second option – single lead agency established a single authority for the coordination of transportation services. However, the “subordinate” departments would have suffered the loss of administrative control and therefore their authority to control the actions of the lead department although they were still responsible for such actions to their immediate “higher authorities.” Difficulties in personnel management and budget preparation and authorization were expected.

The third option, the one recommended – an interdepartmental transportation committee was an organized deviation of the first option where individual departments maintained administrative control over their respective programs. The difference here was that the departments involved needed to agree in principle to certain mutually beneficial objectives.

Reviews of resources and expertise available from each state department were recommended when considering the possibilities of interdepartmental agreements. Certain topical considerations would also need to be reconciled:

- 1) Mutual support of providers with capital and operational assistance. (to ensure that providers who are capitalized with public funds are supported operationally with public funds if they are required.)
- 2) Identify deficiencies in the transportation service delivery system. (geographic areas which are not served or have inadequate service)
- 3) Establish operations payment schedules for providers on a competitive, cost-effective basis. (Provide operations fiscal support to providers which deliver services on the most cost effective basis.)
- 4) Identify the resources and expertise available which can be applied to the

mutual benefit of both departments.

Through interagency coordination, a viable alternative service design should evolve.

Under this program, fiscal and technical support efforts by the respective state agencies could be coordinated and channeled to select local service providers who could collectively service the entire transit needs within a given service area.

The development and implementation of an accounting system capable of segregating expenses incurred by the various program eligibles and cash paying clients was recommended. Such a system was to be designed to provide reports and fiscal documentation for the various social and health service agencies contributing to the service.

Review of:

“Statewide Transit Plan”

Published by: Louisiana Department of Transportation and Development

Authored by: Morphy, Makofsky, Mumphrey, Masson, Inc., May 1987

The purpose of this study was to collect and analyze information to develop a set of recommendations through which transit in Louisiana could be improved. The study (Morphy et al, 1987) focused on the ten urbanized public transit systems in the state and 16(b)(2) operators in the metropolitan statistical areas. The ten systems included in this study were:

- Alexandria Transit System (ATRANS);
- Capitol Transportation Corporation (CTC);
- City of Lafayette Transit System (COLTS);
- City of Lake Charles Transit System (LCTS);
- City of Monroe Transit System (MTS);
- Regional Transit Authority (RTA);
- Louisiana Transit Co., Inc.;
- Westside Transit Lines, Inc.;
- St. Bernard Bus Company (SBURT); and
- Shreveport Area Transit (SPORTRAN).

Data were gathered and analyzed from each of these systems and from other states.

These data included operating data such as ridership, expenses, and revenues; inventories of equipment; and economic data on historic and projected population, employment and per capita personal income for the eight metropolitan statistical areas (MSA's) and the state as a whole.

Transit indicators – ridership levels, vehicle revenue miles, vehicle revenue hours, operating expenses and farebox revenues were examined for a five-year period between 1981 and 1985. Transit assessments were completed for all systems for this five year period. The information for these assessments was compiled using Section 15 reports submitted to the Urban Mass Transit Administration – UMTA (now FTA). In addition, analyses of the systems' performances compared with UMTA national averages for systems of similar sizes were conducted.

Issues concerning transit policy were identified and discussed. These issues included present and future funding levels; the role of transit in economic development efforts; Urban Mass Transportation Administration's move toward privatization; the revitalization of a statewide transit organization; increasing insurance costs; and the problem of duplication of efforts with elderly and handicapped services under the 16(b)(2) program.

Policy recommendations were provided for implementation at both the state and local levels in three areas: transit funding, operations, and management.

Recommendations made in this Statewide Transit Plan were:

State Level

Funding

- 1) Continue public transit funding through the Parish Transportation Fund.
- 2) Establish a dedicated funding source for public transit.
- 3) Exempt public transit systems from fuel tax payments.

Operations

- 1) Create a transit insurance commission.
- 2) Ensure coordination of funding and administration of the 16(b)(2) van program between state departments and participating agencies.
- 3) Develop a model transit marketing program.

Management

- 1) Document economic impacts of transit.
- 2) Establish liaison between the Office of Aviation and Public Transportation (OAPT) and the Department of Commerce.
- 3) Establish liaison between the Office of Aviation and Public Transportation (OAPT), department of Environmental Quality (DEQ), and Department of Natural Resources (DNR).
- 4) Reduce funding needs through the coordination of transportation projects.

Local Level

Funding

- 1) Develop innovative/dedicated funding sources.
- 2) Establish special transit development districts.
- 3) Reduce funding needs through privatization.

Operations

- 1) Develop service arrangements with large institutions/employment centers.
- 2) Implement a technology transfer program.
- 3) Develop cooperative purchasing arrangements.
- 4) Develop new procedures to serve lower density areas.

Management

- 1) Re-establish a statewide transit organization.
- 2) Promote the use of transit in local economic development efforts.
- 3) Encourage/promote the creation of transportation management associations.
- 4) Promote ridesharing.

Review of:

“Coordinating Special Transportation Services in Louisiana”

Published by: Louisiana Department of Transportation and Development

Authored by: Urban Systems, Inc., December 1988.

In 1986 the Louisiana Department of Transportation and Development, through an UMTA Section 6 Demonstration Grant, developed the Special Transportation Enhancement Demonstration Program. The purpose of this program was to address the funding problems of special transportation services through improved coordination efforts. This program would be set up to enhance the transportation of elderly and handicapped persons using Urban Mass Transportation Administration 16(b)(2) vans in an urban area and in a rural area of Louisiana, that could be used as a planning model for similar programs in other areas of the state.

The goals of this study were to prepare a detailed inventory of 16(b)(2) special transportation services in the rural and urban study area, and to develop and implement a coordinated transportation program for the elderly, handicapped, and disadvantaged transit patrons in a rural and urban study area. Orleans and Tangipahoa Parishes were selected as the representative study areas for this demonstration program.

The first part of the study focused on a comprehensive inventory and operational analysis of 16(b)(2) transportation services in each study area. Personal interviews were set up with each agency to obtain information on their transportation policies and operating methods, service area, operating hours, clients, scheduling procedures, trip origins and destinations, and other pertinent data. A questionnaire was completed on each agency.

An operational analysis was performed using the 16(b)(2) monthly reporting forms collected for a 12-month period and average monthly operating data were calculated for each 16(b)(2) vehicle operated by these agencies. Upon completion of these operational analysis a comparison was made between the two study areas, system deficiencies were identified and an estimation of service demand was completed for each parish.

In the second part of the study, coordination alternatives were developed that would meet the service needs of the agencies and lower transportation operating costs. The coordination alternatives examined for this study included: brokerage system, consolidation system, contract service, ad hoc service, central referral service, user-side subsidy program, timesharing, ridesharing, joint purchasing of preventive maintenance and repairs, joint purchasing of insurance, joint purchasing of fuel, and joint purchasing of tires and other parts. These alternatives were evaluated to determine whether the alternative was workable and then whether or not they met the specific needs of agencies in Orleans and Tangipahoa Parishes.

Coordination alternative “packages” were developed for each parish. These packages were presented to the agencies. Each agency was able to select

coordination alternatives that they felt would meet their needs. After the alternatives were selected, Urban Systems met with the agencies to work out the details of each alternative to be implemented, to clarify the operational procedures to be followed, and to set up record keeping requirements to be used for the duration of the demonstration program.

The demonstration program for Orleans Parish was for a six-month period. The Tangipahoa program was for a period of three months. Urban Systems monitored the demonstration program through a “hands on” approach and resolved problems as they arose. Urban Systems reported that some agencies were very cooperative and provided valuable assistance in understanding the transportation problems. Others were less helpful. The time allowed for implementation limited the coordination strategies used. In particular, the contract service alternative and the evaluation of preventive maintenance and repairs would have required more time to implement. Additionally, participation in the program was not mandatory. Some agencies participated only minimally or not at all and were not cooperative. One of the lessons learned here was that: “Some type of formal coordination incentive might be necessary to stimulate a more successful program.” The lack of state start-up funds to implement programs was noted as a significant limitation. This was occurring at a time when many agencies were already tightening their belts and absorbing additional responsibilities without compensation.

“Based on Urban Systems’ experience during this project, one of the strongest impediments to coordination of these services is the basic structure of special transportation programs in the state.” To achieve maximum coordination at minimum state administrative costs, Urban Systems recommended the centralized provider concept. This concept calls for the provision of special transportation services by a centralized private operator in a defined service area. The “coordination burden” is on that private provider. The idea is that the operator would have the incentive to coordinate services, resulting in an increased profit. The implementation of this proposal is viewed as a long term proposition.

Reasoning that went into the development of the centralized provider concept:

- the federal regulations and the State of Louisiana have no restrictions on the number of agencies in a geographic area to receive 16(b)(2) vehicles; this practice does not encourage coordination of transportation service,
- agencies usually have insufficient personnel to dedicate the time and expertise required to coordinate with other agencies in the area,
- coordination requires the allocation of all transportation costs, a problem for many agencies,
- conflicting scheduling needs inhibit coordination,
- there is no incentive for 16(b)(2) agencies to coordinate and agencies do not have adequate staff trained in fleet and transportation management,
- coordination will require outside technical assistance to agencies. DOTD does not have staff available or the time required to implement and monitor service coordination measures,
- other state agencies who are providing operating funds also do not have

- staff, time, or training to monitor coordination,
- state level technical assistance is a problem not only due to the lack of resources, but also because of unfamiliarity with local conditions, coordination is best accomplished by someone with transportation experience and a knowledge of local conditions, and
- outside assistance from the state or regional planning agencies is helpful but costly, and can not accomplish the results of full-time coordination efforts from within a transportation provider agency.

A general description of the centralized private provider concept:

- The basic premise is to concentrate transportation resources and have them managed by a person(s) with transportation experience and with an economic incentive to coordinate service.
- A single agency would have an incentive to coordinate all trips in the area regardless of whose clients were being transported. Ideally, the agency providing transportation would be organized specifically for this purpose.
- To centralize the transportation services in an area, the state's program procedures would have to be restructured to emphasize single providers in an area. Where urban or rural public services are available, it would be logical to specify the public transit operator as the provider of transportation services.
- Agencies which needed service would be required to contract with the provider, using operating funds federal programs to pay for service on an as needed basis.
- Administrative responsibilities of providing transportation service in an area will be limited to only one agency.
- If Section 18 providers were assured of receiving vehicles under the 16(b)(2) program and having service purchased by all agencies in the area, it would strengthen the Section 18 providers program considerably.
- Providers would have to be able to use 16(b)(2) vehicles without restrictions. Contracts for service with agencies working with elderly and persons with disabilities should be sufficient to document that the objectives of the 16(b)(2) program are met.
- A single provider in a service area will reduce the administrative burden at the state level.
- State agencies would get a better record of the number of trips provided and the true cost for each trip.
- Centralized transportation under one agency in an area would enhance opportunities for private enterprise participation.
- Centralization of services will require that state agencies involved coordinate their respective program procedures. A Special Transportation Committee of state agencies was recommended

Recommendations under the existing program structure:

- DOTD should not attempt to assist agencies on an individual basis to develop service coordination. The role of regional planning commissions should be expanded to include assistance throughout the year aimed at developing service and non-service coordination measures for agencies in their areas. Without this type of continuing assistance, it is doubtful that significant improvements can be made in service coordination.
- Timesharing and ridesharing arrangements could be worked out between agencies before applications for vehicles are made. This could be done with assistance from the regional planning commissions.
- Multiple agencies could submit an application for a single vehicle similar to a timesharing arrangement.
- It is recommended that indicators be used to measure the impact of coordination services. The recommended indicators are: operating cost per trip, operating cost per vehicle mile, and operating cost per hour.
- Monthly 16(b)(2) reporting forms should be revised to eliminate inconsistencies in the way data is reported.
- Monthly 16(b)(2) agency reports should be reviewed for completeness and accuracy.
- An onsite review of agency transportation programs should be performed annually. The review should be done by the Regional Planning Commission with efficiency indicators provided by DOTD.
- Group insurance participation is recommended for all special transportation service agencies.
- DOTD should require that the Maintenance/Preventive Maintenance Checklist be submitted each month on each vehicle with a signature of an individual responsible. These records should be reviewed annually as a part of the application review process.
- “Cost Saving Methods for Special Transportation Programs in Louisiana” developed by Urban Systems should be distributed to all 16(b)(2) agencies.
- DOTD should conduct coordination workshops to inform agencies of coordination alternatives.
- Leasing of vehicles should be considered when the cost of service is not increased and the quality of service is improved.
- DOTD should analyze the current procurement process to determine if it would be more effective to allow procurement of certain vehicles through a local process. The benefits of improved maintenance service and expansion of support would appear to offset any minor cost savings and reduce the time required to receive a vehicle.
- The state bid list should be reviewed to determine if appropriate tires are available for driving conditions.
- For effective utilization of funds supporting special transportation services, the use of funds must be coordinated by the agencies administering them. A permanent Transportation Committee should be established to: coordinate the expenditure of capital and operating funds, exchange information about agencies receiving funding, disseminate information on coordination measures to service providers, and work out regulatory

problems which are barriers to coordination. Administrative funds from the various state agencies should be dedicated to funding a staff person whose duty is to implement coordination strategies recommended by the Transportation Committee.

2.2. Recommended Methodology Based on Review of Previous Studies

The methodology used in this assessment is a combination of the strategies used to assess transit in other states and previous assessments performed in Louisiana. Just as in the North Carolina plan and the “Statewide Assessment of Transportation Needs in Nonurbanized Areas, Louisiana”; the study begins with a demographic analysis of all parishes. Demographic and socioeconomic data were collected and analyzed for the State of Louisiana at the parish level from the 1990 U.S. Census (with updated 1995 population figures) to help determine the number and percentage of persons that are likely to need public transit and paratransit services or human service transportation, and which geographic areas have high concentrations of transit dependent persons.

Methods developed by Ecosometrics, Inc. were employed in the identification of transit need and transit demand. The findings are presented in section 2.4. Transit Need and section 2.5. The Demand For Transportation in Louisiana’s Rural Parishes.

2.3. Transit Planning in Urbanized Areas

To determine what type of transit coordination efforts are ongoing or planned in urbanized areas; interviews were conducted with the transit operators and the planning entities that provide planning support to the transit operators. The urbanized areas contacted were Alexandria, Baton Rouge, Houma, Lafayette, Lake Charles, Monroe, New Orleans, and Shreveport. The Slidell urbanized area does not have a public transit system. In each urbanized area the planning agency is the metropolitan planning organization for the urbanized area.

While in general there is little coordination going on between public transportation providers, taxi companies, and special transportation agencies there are some exceptions that are discussed below. It should be noted that the Welfare to Work (WtW) program currently being implemented by the Louisiana Department of Labor has a transportation component and is generating an assessment of need and coordination activity in some urban areas.

Only one of the urbanized areas, City of Lafayette, is actively in the process of conducting transit planning in their urbanized area. The purpose for this planning effort is to study the extension of the City of Lafayette Transit (COLT) service into outlying areas of Lafayette Parish including the municipalities of Broussard, Carencro, Duson, Scott, and Youngsville. The study evaluates existing service effectiveness and efficiency and recommends potential service and operational improvements. An assessment of demand in outlying areas was conducted for the development of potential service alternatives and operational requirements.

Tasks within the plan included base studies of demographic conditions and characteristics in the parish, transit generators and attractors, evaluation of existing services, service coverage, cost efficiency, route and service profiles, performance measures, existing future needs and deficiencies, and existing revenue sources.

Three additional routes were identified to meet the needs of five high transit demand areas. They are: the Carencro Route, the Scott/Duson Route, and the Southpark/Broussard Route. The estimated annual cost to provide for this expansion of service is \$380,000. Several changes have also been recommended for the existing route structure. The total additional cost for the changes recommended to the existing system is \$221,500 annually.

The following provides a summary of coordination efforts in each urbanized area.

Alexandria:

The Alexandria system, ATRANS provides service in the city limits of Alexandria and Pineville. Local service agencies do buy passes for clients who are able to use the fixed route system. Typically they will buy clients a monthly pass system.

There are no coordination efforts ongoing at this time. The contact at the metropolitan planning organization stated that no coordination or needs studies

were currently being pursued or planned. Interviews with the transit operator indicated that no coordination efforts were underway although there was an awareness of the WtW program and the transportation need that the program will generate.

Baton Rouge:

The Baton Rouge CTC system serves East Baton Rouge Parish. There are no coordination efforts in place with special transportation providers. There is some purchasing of transit passes by social service agencies, but there is no coordinated program for this.

The Capital Region Planning Commission recently evaluated and recommended changes in fixed routes in an effort to make them more responsive to passenger needs. The route changes have been implemented by CTC.

CTC is addressing the pending WtW need through the addition of four special routes. The routes serve different zones of the city with route deviations in each zone depending on client need. The Louisiana Department of Social Services and the Capital Region Planning Commission evaluated WtW transportation needs by identifying client population locations and the locations of service providers critical to WtW clients. Job service centers, day care facilities, employment centers, etc. were mapped and four routes created to service potential WtW clients. The service has been implemented using vans. Initially only WtW clients will be able to use the service. After determining the WtW ridership, the service will be opened to the general public if there is excess capacity. The contractor who currently operates the CTC Lift program is operating the service.

Houma:

Good Earth Transit in Houma serves the city of Houma and has some coordination efforts in place. Good Earth has an active coordination program with the Terrebonne Association of Retarded Citizens. Good Earth located its facilities next to the TARC facilities at the Terrebonne Regional Airport. This has resulted in coordinated efforts in several areas. The two organizations share a maintenance facility and mechanics. This reduces the cost of vehicle maintenance for both agencies. Good Earth has hired TARC clients to perform jobs such as washing buses and providing lawn maintenance at the Good Earth facility. This has provided needed jobs for TARC clients. TARC uses Good Earth as much as possible for transportation of its clients. Clients are trained to use the Good Earth system and when clients are comfortable with the system, passes are purchased from Good Earth for TARC clients. This reduces the need for TARC to provide the transportation, freeing TARC vehicles for those clients who cannot use the public transportation system.

Other social service agencies in the area purchase day passes for their clients from Good Earth. There is no coordinated program for purchase of passes.

Lafayette:

The Lafayette transit system, COLT, serves Lafayette Parish. Phase II of the recently completed transit study evaluated the potential for cooperation and coordination between the University of Southwestern Louisiana transit system, the Lafayette Parish School Board Transportation system, and COLT. Opportunities for coordination have been identified primarily in the sharing of maintenance facilities. A one-call system was also recommended so that persons needing transportation can call one number and be referred to an appropriate provider. This would include referrals to special transportation providers operating in the parish.

Phase III of the study will be completed by the end of 1998 and will provide a long-range plan for provision of transit service in Lafayette Parish.

Existing coordination between social service agencies and COLT is limited to the purchase of client passes for the system.

Lake Charles:

There is no ongoing coordination in the Lake Charles transit system. It was unclear whether service agencies were purchasing passes for their clients.

Monroe:

Monroe does not have any coordination projects underway. Purchase of passes by social service agency clients does occur, but there are no other coordination activities.

New Orleans:

Public transit in the New Orleans region is composed of the Regional Transit Authority (Orleans Parish), the St. Bernard Bus Company (St. Bernard Parish), Westside Transit (westbank Jefferson Parish), and Louisiana Transit (eastbank Jefferson Parish). There are some ongoing coordination efforts between the transit operators in Orleans and Jefferson Parishes. St. Bernard has not been involved in this coordination.

Fixed route operations in Orleans and St. Bernard are currently being revised to create a seamless system to allow a transit client to buy a day pass and ride throughout the two parishes using all three of the transit systems. This is currently in the planning stage and requires some route revisions and consolidation of transfer points for implementation. When implemented this will make transit travel within the Orleans and Jefferson systems much easier for patrons. It will also help address a long standing problem of transit from the eastbank of the Mississippi River to the westbank of the river and vice versa. Related to this effort is the development of a "one dial" number for persons to call who are requesting transit information for Orleans and Jefferson Parishes. Currently persons have to call each transit operator individually to get information about routes, fares, etc.

There is an ongoing coordination effort for the paratransit services provided by Orleans and Jefferson Parishes. The LIFT program in Orleans Parish and the

MITS program in Jefferson Parish have established common transfer points between the two parishes for users of these services. Three transfer points are now in use. There is also an effort to establish a waiting area at the New Orleans International Airport for these services to pick up users who are flying into the area and require LIFT or MITS service. Another coordination effort between LIFT and MITS is the development of a common application form for service qualification. This simplifies this process for clients and makes it easier for them to apply for service from LIFT and MITS.

Shreveport:

In Shreveport SPORTRAN serves the cities of Shreveport and Bossier. No coordination efforts are ongoing with other providers in the area. While some social service agencies are purchasing passes for their clients, SPORTRAN has taken the position that these agencies should pay the full cost of service, per federal regulations, and thus would be charged more for a day pass than the general public.

The social service agencies are reluctant to do this and thus when purchasing passes do not identify themselves, but purchase them as private citizens.

The Northwest Council of Governments is currently doing an evaluation of WtW needs in the area. This has consisted of plotting the location of potential WtW participants, training centers and other origins and destinations for potential WtW trips. This data has been overlaid with the fixed routes of SPORTRAN. The objective is to provide SPORTRAN with data that will assist them in evaluating the feasibility of meeting these needs. The Council of Governments is also tracking on a GIS system ADA clients that are using the SPORTRAN fixed route service. Stops where disabled clients are boarding or debarking buses are being identified so that priorities can be developed for needed ADA improvements to facilities.

2.4. Transit Need

Comparisons of the relative transportation needs of particular geographic areas can create useful indicators of where to focus limited resources. This report presents our analysis of relative needs for the State of Louisiana, with the local governmental units (parishes) as the geographic areas being considered. Two factors are considered: the relative travel needs of transit dependent populations, and welfare to work transportation needs.

Transportation Needs For Transit Dependent Populations

Several groups of persons are highly dependent on public transit services for their mobility. This is often due to their inability to afford an automobile or their inability to operate one. Such persons often travel as auto passengers, but they are then dependent on the schedules and the generosity of others for their trips. Thus, public transit services offer them a means of freedom and independence.

The Transportation Needs Ranking is a composite of several demographic measures, proven over many years of research to be a valid indicator of potential transit ridership. Demographic and socioeconomic data were collected and analyzed for the State of Louisiana at the parish level from the 1990 U.S. Census (with updated 1995 population figures) to help determine the number and percentage of persons that are likely to need public transit and paratransit services or human service transportation, and which geographic areas have high concentrations of transit dependent persons. For this study, transit dependence was defined in terms of the following target population groups:

- 1) youth (less than 16 years of age),
- 2) elderly (65 years of age and older),
- 3) persons with a mobility limitation (16 years of age and above),
- 4) autoless households, and
- 5) low income (below the poverty level).

Information on each of these factors was compiled for each of the 64 parishes in Louisiana. We found substantial numbers of persons in these population categories in Louisiana.

For many of these people, public and human services transportation are critical to providing their basic mobility. The information from the Census on the number of persons in each category does not by itself provide a measure of the **number of trips** that these persons might take (referred to as their “potential demand”), but this information is most useful as means of developing a ranking to determine **which parts of the State have the highest relative need for transportation**. The current routes and services of public transit and human service transportation operators can then be compared to the areas of highest potential need to determine if service is being provided in the most appropriate areas.

Identification Of High Need Areas

Ranking Procedures

To identify which parts of Louisiana have the highest relative transportation needs in terms of their transit dependent populations, data were collected on all parishes in the State. These data included information on each of the five factors listed above. The parishes were ranked twice from highest need to least need on each of these five factors: once to identify areas with **relatively high numbers** of persons with transit dependent characteristics (per square mile), and the second time to identify areas with **relatively high percentages** of persons with transit dependent characteristics. After determining areas with the most transportation needs in terms of population density and in terms of percentages, we ranked the parishes again, this time according to the sum of the two previous rankings so as to produce one overall measure of areas with relatively high transportation needs.

These rankings are useful for identifying the portions of State that can be considered to be “high need” areas for transportation services because of the demographic characteristics that indicate transit dependence. We can also look at other measures of transportation needs as well. We can then contrast the areas with high needs for transportation service with current service patterns to determine if there are significant gaps in service, which would be high need areas with no transit service.

Parishes with High Numbers of Transit-Dependent Persons with Needs

For each parish, the numbers of persons having each of the five transportation need characteristics were identified from Census data. To correct for any biases that might result from comparing parishes that might be of substantially different sizes, we converted the total population measures to measures of **persons per square mile** for each transportation need characteristic. For each of the transportation need characteristics, the parishes in the State were then ranked in order relative to the other parishes in the State. The rankings of each of the five need characteristics were then summed, and the parishes were re-ranked according to the sum of the five separate rankings. This produced an overall ranking of parishes in terms of the total population density of transit-dependent persons, which is shown in Table 2.4.1. For these rankings, the lower scores represent the areas with the greater needs.

The relative need was next divided into four categories: greatest need (the top 1/4), second need, third need, and least need. This information is shown in Table 2.4.2. These four aggregate need categories were then mapped, and the results are shown in Figure 2.4.1.

Table 2.4.1. Rank by Total Population Per Parish

Parish	Population (97 estimate)	Households (97 estimate)	16&under Density	65 + Density	Mob. Lim. Density	Zero Car Density	Below Pov Density	TOTAL RANKINGS
Acadia Parish	57,817	19,963	24.48	10.07	3.97	4.08	25.70	89
Allen Parish	23,996	8,047	7.04	3.56	1.07	1.20	7.73	252
Ascension Parish	69,300	22,847	57.03	16.03	6.25	6.38	34.95	38
Assumption Parish	22,683	7,405	19.13	7.27	2.79	3.47	18.74	122
Avoyelles Parish	40,558	13,903	12.44	7.01	2.79	2.35	16.61	148
Beauregard Parish	31,902	10,968	6.84	2.80	0.92	0.78	4.53	286
Bienville Parish	16,785	6,197	4.94	3.50	1.11	1.16	5.95	273
Bossier Parish	92,781	33,246	27.08	9.26	2.77	2.90	16.22	122
Caddo Parish	244,690	91,624	71.95	37.48	11.78	14.60	66.37	25
Calcasieu Parish	180,320	64,645	41.46	16.88	5.62	5.24	28.47	47
Caldwell Parish	10,324	3,760	4.67	2.82	0.84	0.75	5.20	300
Cameron Parish	8,671	2,914	1.94	0.68	0.20	0.18	1.13	320
Catahoula Parish	11,159	4,013	4.27	2.09	0.88	0.83	5.67	301
Claiborne Parish	17,156	5,954	5.32	4.07	1.15	1.37	6.75	251
Concordia Parish	20,857	7,325	8.24	3.73	1.39	1.80	9.01	217
De Soto Parish	23,190	8,385	7.65	4.19	1.44	1.80	8.50	213
East Baton Rouge Parish	396,692	144,588	205.33	76.30	23.27	27.97	158.83	15
East Carroll Parish	9,086	2,934	7.55	3.17	1.17	2.19	12.57	219
East Feliciana Parish	20,996	6,090	11.31	4.57	1.49	1.42	9.39	203
Evangeline Parish	34,397	12,004	14.15	6.69	3.10	2.48	17.28	139
Franklin Parish	22,038	7,649	9.83	5.50	1.66	1.78	12.04	189
Grant Parish	18,770	6,636	7.27	3.69	1.32	0.96	6.82	251
Iberia Parish	72,084	24,201	34.63	12.54	4.16	4.90	30.31	63
Iberville Parish	30,893	9,841	13.35	5.48	1.56	2.70	13.18	167
Jackson Parish	15,467	5,668	6.96	4.63	1.40	1.33	6.43	235
Jefferson Davis Parish	31,883	11,043	13.06	6.00	2.22	1.87	12.67	165
Jefferson Parish	454,838	168,677	350.87	148.46	47.69	52.57	205.32	10
La Salle Parish	13,852	5,159	5.26	3.42	1.42	0.77	4.54	276
Lafayette Parish	183,844	67,354	160.47	50.51	17.05	21.73	119.94	20
Lafourche Parish	88,003	29,826	21.25	7.35	2.39	2.88	17.75	132
Lincoln Parish	42,203	13,843	18.25	9.49	2.49	3.31	19.77	117
Livingston Parish	84,620	28,717	30.53	9.01	3.99	2.20	15.77	119
Madison Parish	13,115	4,475	6.17	2.78	0.92	1.78	8.68	253
Morehouse Parish	31,969	11,029	11.04	5.82	1.65	2.26	12.15	176
Natchitoches Parish	38,381	13,183	7.72	3.81	1.35	1.63	9.23	219

Orleans Parish 474,010 179,004 672.75 356.83 137.14 327.45 840.01 5

Table 2.4.1. Rank by Total Population Per Parish (continued)

Parish	Population (97 estimate)	Households (97 estimate)	16&under Density	65 + Density	Mob. Lim. Density	Zero Car Density	Below Pov Density	TOTAL RANKINGS
Ouachita Parish	147,753	52,508	60.76	26.30	8.76	10.28	55.28	30
Plaquemines Parish	25,902	8,327	8.54	2.35	0.87	1.20	6.69	268
Pointe Coupee Parish	23,285	8,011	11.21	5.19	1.80	2.27	12.12	178
Rapides Parish	125,753	43,763	25.86	11.92	4.18	4.24	21.37	82
Red River Parish	9,827	3,498	6.82	3.74	1.15	1.61	8.27	241
Richland Parish	20,962	7,173	10.28	5.76	1.69	1.95	11.87	182
Sabine Parish	23,885	8,833	6.75	4.32	1.56	1.22	6.98	235
St. Bernard Parish	66,631	23,177	34.76	16.21	5.57	4.31	21.12	64
St. Charles Parish	47,577	15,993	42.98	10.76	4.04	4.44	22.44	73
St. Helena Parish	9,717	3,302	6.93	2.96	1.23	1.11	8.23	255
St. James Parish	20,972	6,493	24.53	8.29	3.10	4.64	21.44	99
St. John the Baptist Parish	42,472	13,454	56.89	12.82	4.79	6.51	32.50	47
St. Landry Parish	83,299	28,463	24.84	10.55	4.81	5.06	30.86	68
St. Martin Parish	46,539	15,489	17.29	5.43	2.30	2.80	16.03	153
St. Mary Parish	57,467	19,249	27.44	8.95	3.61	4.73	25.21	88
St. Tammany Parish	182,636	63,683	46.31	15.09	4.97	3.23	22.89	68
Tangipahoa Parish	95,389	33,123	29.42	12.09	4.72	4.91	32.85	60
Tensas Parish	6,877	2,444	3.33	1.99	0.54	0.98	5.36	303
Terrebonne Parish	102,699	33,849	22.73	6.36	2.90	2.96	18.49	127
Union Parish	21,702	7,906	5.87	3.71	1.29	0.94	5.53	268
Vermilion Parish	51,487	18,208	11.89	5.58	1.75	1.68	11.15	185
Vernon Parish	53,457	16,475	12.47	2.69	1.35	1.27	7.56	236
Washington Parish	43,406	15,631	16.54	9.23	3.72	3.24	19.58	116
Webster Parish	42,882	16,196	17.12	11.35	3.92	3.76	17.34	107
West Baton Rouge Parish	20,775	7,092	27.36	9.26	3.03	3.74	20.38	101
West Carroll Parish	12,209	4,423	8.72	5.37	2.05	1.29	9.08	202
West Feliciana Parish	13,062	2,718	5.74	2.18	0.89	0.91	6.57	288
Winn Parish	16,807	5,967	4.29	2.60	0.88	0.95	4.48	299

Table 2.4.2. Relative Need

Parish	Population (97 estimate)	Households (97 estimate)	16&under Density	65 + Density	Mob. Lim. Density	Zero Car Density	Below Pov Density	TOTAL RANKINGS
Orleans Parish	474,010	179,004	672.75	356.83	137.14	327.45	840.01	5
Jefferson Parish	454,838	168,677	350.87	148.46	47.69	52.57	205.32	10
East Baton Rouge Parish	396,692	144,588	205.33	76.30	23.27	27.97	158.83	15
Lafayette Parish	183,844	67,354	160.47	50.51	17.05	21.73	119.94	20
Caddo Parish	244,690	91,624	71.95	37.48	11.78	14.60	66.37	25
Ouachita Parish	147,753	52,508	60.76	26.30	8.76	10.28	55.28	30
Ascension Parish	69,300	22,847	57.03	16.03	6.25	6.38	34.95	38
Calcasieu Parish	180,320	64,645	41.46	16.88	5.62	5.24	28.47	47
St. John the Baptist Parish	42,472	13,454	56.89	12.82	4.79	6.51	32.50	47
Tangipahoa Parish	95,389	33,123	29.42	12.09	4.72	4.91	32.85	60
Iberia Parish	72,084	24,201	34.63	12.54	4.16	4.90	30.31	63
St. Bernard Parish	66,631	23,177	34.76	16.21	5.57	4.31	21.12	64
St. Landry Parish	83,299	28,463	24.84	10.55	4.81	5.06	30.86	68
St. Tammany Parish	182,636	63,683	46.31	15.09	4.97	3.23	22.89	68
St. Charles Parish	47,577	15,993	42.98	10.76	4.04	4.44	22.44	73
Rapides Parish	125,753	43,763	25.86	11.92	4.18	4.24	21.37	82
St. Mary Parish	57,467	19,249	27.44	8.95	3.61	4.73	25.21	88
Acadia Parish	57,817	19,963	24.48	10.07	3.97	4.08	25.70	89
St. James Parish	20,972	6,493	24.53	8.29	3.10	4.64	21.44	99
West Baton Rouge Parish	20,775	7,092	27.36	9.26	3.03	3.74	20.38	101
Webster Parish	42,882	16,196	17.12	11.35	3.92	3.76	17.34	107
Washington Parish	43,406	15,631	16.54	9.23	3.72	3.24	19.58	116
Lincoln Parish	42,203	13,843	18.25	9.49	2.49	3.31	19.77	117
Livingston Parish	84,620	28,717	30.53	9.01	3.99	2.20	15.77	119
Assumption Parish	22,683	7,405	19.13	7.27	2.79	3.47	18.74	122
Bossier Parish	92,781	33,246	27.08	9.26	2.77	2.90	16.22	122
Terrebonne Parish	102,699	33,849	22.73	6.36	2.90	2.96	18.49	127
Lafourche Parish	88,003	29,826	21.25	7.35	2.39	2.88	17.75	132
Evangeline Parish	34,397	12,004	14.15	6.69	3.10	2.48	17.28	139
Avoyelles Parish	40,558	13,903	12.44	7.01	2.79	2.35	16.61	148
St. Martin Parish	46,539	15,489	17.29	5.43	2.30	2.80	16.03	153
Jefferson Davis Parish	31,883	11,043	13.06	6.00	2.22	1.87	12.67	165
Iberville Parish	30,893	9,841	13.35	5.48	1.56	2.70	13.18	167
Morehouse Parish	31,969	11,029	11.04	5.82	1.65	2.26	12.15	176
Pointe Coupee Parish	23,285	8,011	11.21	5.19	1.80	2.27	12.12	178

Richland Parish 20,962 7,173 10.28 5.76 1.69 1.95 11.87 **182**

Table 2.4.2. Relative Need (*continued*)

Parish	Population (97 estimate)	Households (97 estimate)	16&under Density	65 + Density	Mob. Lim. Density	Zero Car Density	Below Pov Density	TOTAL RANKINGS
Vermilion Parish	51,487	18,208	11.89	5.58	1.75	1.68	11.15	185
Franklin Parish	22,038	7,649	9.83	5.50	1.66	1.78	12.04	189
West Carroll Parish	12,209	4,423	8.72	5.37	2.05	1.29	9.08	202
East Feliciana Parish	20,996	6,090	11.31	4.57	1.49	1.42	9.39	203
De Soto Parish	23,190	8,385	7.65	4.19	1.44	1.80	8.50	213
Concordia Parish	20,857	7,325	8.24	3.73	1.39	1.80	9.01	217
East Carroll Parish	9,086	2,934	7.55	3.17	1.17	2.19	12.57	219
Natchitoches Parish	38,381	13,183	7.72	3.81	1.35	1.63	9.23	219
Jackson Parish	15,467	5,668	6.96	4.63	1.40	1.33	6.43	235
Sabine Parish	23,885	8,833	6.75	4.32	1.56	1.22	6.98	235
Vernon Parish	53,457	16,475	12.47	2.69	1.35	1.27	7.56	236
Red River Parish	9,827	3,498	6.82	3.74	1.15	1.61	8.27	241
Claiborne Parish	17,156	5,954	5.32	4.07	1.15	1.37	6.75	251
Grant Parish	18,770	6,636	7.27	3.69	1.32	0.96	6.82	251
Allen Parish	23,996	8,047	7.04	3.56	1.07	1.20	7.73	252
Madison Parish	13,115	4,475	6.17	2.78	0.92	1.78	8.68	253
St. Helena Parish	9,717	3,302	6.93	2.96	1.23	1.11	8.23	255
Plaquemines Parish	25,902	8,327	8.54	2.35	0.87	1.20	6.69	268
Union Parish	21,702	7,906	5.87	3.71	1.29	0.94	5.53	268
Bienville Parish	16,785	6,197	4.94	3.50	1.11	1.16	5.95	273
La Salle Parish	13,852	5,159	5.26	3.42	1.42	0.77	4.54	276
Beauregard Parish	31,902	10,968	6.84	2.80	0.92	0.78	4.53	286
West Feliciana Parish	13,062	2,718	5.74	2.18	0.89	0.91	6.57	288
Winn Parish	16,807	5,967	4.29	2.60	0.88	0.95	4.48	299
Caldwell Parish	10,324	3,760	4.67	2.82	0.84	0.75	5.20	300
Catahoula Parish	11,159	4,013	4.27	2.09	0.88	0.83	5.67	301
Tensas Parish	6,877	2,444	3.33	1.99	0.54	0.98	5.36	303
Cameron Parish	8,671	2,914	1.94	0.68	0.20	0.18	1.13	320

Figure 2.4.1 placeholder

Parishes with High Percentages of Persons with Transportation Needs

The process was then repeated, this time using the **percentage** of the total population of each parish with transit dependent characteristics. The results are shown in Table 2.4.3. Once again, the relative need was next divided into four categories: greatest need (the top 1/4), second need, third need, and least need. Table 2.4.4 summarizes the overall rankings by percentages of the population in need. These results are shown in Figure 2.4.2.

Parishes with Combinations of High Need Densities and Percentages

The total overall density-based ranking was then added to the total overall percentage-based ranking to create a combined ranking. The resulting combined rankings are shown in Table 2.4.5, and are mapped in Figure 2.4.3.

Discussion Of Results

Parishes with High Numbers of Persons with Transportation Needs

Figure 2.4.1 shows results based on the densities of persons having each of the five transportation need characteristics. The needs expressed on a per square mile basis (density-based rankings) follow very closely the population distribution of the State, with higher need areas associated with higher populations.

Parishes with High Percentages of Persons with Transportation Needs

Figure 2.4.2 shows results based on the percentages persons having each of the five transportation need characteristics. The percentage based rankings show the highest need areas in the northeast corner of the State down to Acadia parish, and on the western side of the State south and east of Shreveport.

Parishes with Combinations of High Need Densities and Percentages

Figure 2.4.3 shows results based on the combination of the densities and the percentages of persons having each of the five transportation need characteristics. In effect, equal weights are being given to the density rankings and the percentage rankings in their combination. (Other weightings are possible but are difficult to justify from a conceptual standpoint.)

The combined rankings focus on the population centers, with areas around New Orleans, Baton Rouge, New Iberia, Shreveport, and Monroe as areas of highest need. The one highest need area that does not fit the typical pattern is the multi-parish area in the center of the State that extends southwest from Alexandria almost to Lake Charles.

Table 2.4.3. Percentage of Target Population

Parish	Population (97 estimate)	Households (97 estimate)	16&under Percent of Total	65 + Percent of Total	Mob. Lim. Percent of Total	Zero Car Percent of Total	Below Pov Percent of Total	TOTAL PERCENT RANKING
Acadia Parish	57,817	19,963	28.70%	11.81%	6.64%	13.87%	30.55%	195
Allen Parish	23,996	8,047	25.38%	12.84%	5.69%	12.94%	29.95%	331
Ascension Parish	69,300	22,847	28.61%	8.04%	4.44%	9.63%	17.70%	402
Assumption Parish	22,683	7,405	28.50%	10.83%	5.88%	15.91%	28.24%	259
Avoyelles Parish	40,558	13,903	26.43%	14.90%	8.61%	14.53%	37.10%	148
Beauregard Parish	31,902	10,968	26.37%	10.78%	5.25%	8.78%	18.29%	398
Bienville Parish	16,785	6,197	25.06%	17.79%	7.81%	16.06%	31.22%	181
Bossier Parish	92,781	33,246	26.36%	9.01%	3.99%	7.91%	16.22%	460
Caddo Parish	244,690	91,624	25.56%	13.32%	5.78%	13.81%	24.03%	318
Calcasieu Parish	180,320	64,645	26.41%	10.76%	4.95%	9.30%	18.48%	420
Caldwell Parish	10,324	3,760	25.19%	15.23%	6.22%	11.13%	28.79%	312
Cameron Parish	8,671	2,914	27.47%	9.68%	3.99%	7.42%	16.24%	429
Catahoula Parish	11,159	4,013	27.18%	13.31%	7.83%	14.85%	36.79%	183
Claiborne Parish	17,156	5,954	23.06%	17.67%	7.26%	17.03%	31.98%	231
Concordia Parish	20,857	7,325	27.55%	12.48%	6.55%	17.07%	30.57%	229
De Soto Parish	23,190	8,385	26.49%	14.50%	6.88%	17.25%	29.82%	200
East Baton Rouge Parish	396,692	144,588	24.63%	9.15%	3.76%	9.20%	19.69%	496
East Carroll Parish	9,086	2,934	32.73%	13.73%	7.97%	29.53%	56.82%	67
East Feliciana Parish	20,996	6,090	26.67%	10.79%	5.68%	11.47%	25.03%	328
Evangeline Parish	34,397	12,004	28.23%	13.34%	8.82%	13.95%	35.12%	122
Franklin Parish	22,038	7,649	27.35%	15.32%	6.55%	14.22%	34.46%	219
Grant Parish	18,770	6,636	26.75%	13.60%	6.78%	9.93%	25.46%	266
Iberia Parish	72,084	24,201	29.16%	10.56%	5.02%	12.33%	25.83%	323
Iberville Parish	30,893	9,841	26.61%	10.92%	4.61%	16.90%	27.98%	325
Jackson Parish	15,467	5,668	25.27%	16.82%	6.98%	13.01%	23.86%	279
Jefferson Davis Parish	31,883	11,043	27.72%	12.74%	6.63%	11.45%	27.29%	480
Jefferson Parish	454,838	168,677	23.95%	10.13%	4.33%	9.67%	14.14%	236
La Salle Parish	13,852	5,159	24.04%	15.64%	8.73%	9.44%	21.17%	417
Lafayette Parish	183,844	67,354	26.30%	8.28%	3.86%	9.71%	20.19%	272
Lafourche Parish	88,003	29,826	26.85%	9.29%	4.18%	10.84%	22.87%	451
Lincoln Parish	42,203	13,843	20.59%	10.71%	3.60%	11.41%	26.58%	472
Livingston Parish	84,620	28,717	28.05%	8.27%	5.15%	5.98%	14.62%	393
Madison Parish	13,115	4,475	30.92%	13.92%	6.87%	26.18%	44.62%	125
Morehouse Parish	31,969	11,029	27.44%	14.46%	5.82%	16.39%	30.95%	265
Natchitoches Parish	38,381	13,183	26.44%	13.05%	6.38%	16.19%	33.93%	247

Table 2.4.3. Percentage of Target Population (*continued*)

Parish	Population (97 estimate)	Households (97 estimate)	16&under Percent of Total	65 + Percent of Total	Mob. Lim. Percent of Total	Zero Car Percent of Total	Below Pov Percent of Total	TOTAL PERCENT RANKING
Orleans Parish	474,010	179,004	24.50%	13.00%	6.83%	31.49%	31.63%	226
Ouachita Parish	147,753	52,508	26.11%	11.30%	5.21%	12.44%	24.67%	357
Plaquemines Parish	25,902	8,327	28.23%	7.76%	4.16%	12.38%	22.63%	394
Pointe Coupee Parish	23,285	8,011	27.69%	12.83%	6.27%	16.37%	30.34%	241
Rapides Parish	125,753	43,763	26.01%	11.99%	6.14%	12.21%	22.56%	332
Red River Parish	9,827	3,498	28.25%	15.50%	6.80%	18.82%	35.11%	152
Richland Parish	20,962	7,173	27.86%	15.62%	6.59%	15.43%	33.20%	202
Sabine Parish	23,885	8,833	25.77%	16.48%	8.20%	12.67%	27.10%	200
St. Bernard Parish	66,631	23,177	24.26%	11.31%	5.20%	8.65%	14.93%	438
St. Charles Parish	47,577	15,993	28.76%	7.20%	3.84%	8.80%	15.18%	428
St. Helena Parish	9,717	3,302	28.65%	12.23%	7.21%	13.55%	34.45%	156
St. James Parish	20,972	6,493	28.90%	9.77%	5.21%	17.74%	25.51%	281
St. John the Baptist Parish	42,472	13,454	31.15%	7.02%	3.84%	11.22%	17.95%	367
St. Landry Parish	83,299	28,463	28.73%	12.20%	7.95%	17.11%	36.32%	132
St. Martin Parish	46,539	15,489	29.09%	9.14%	5.51%	14.14%	27.32%	277
St. Mary Parish	57,467	19,249	28.96%	9.45%	5.44%	14.90%	26.98%	276
St. Tammany Parish	182,636	63,683	27.37%	8.92%	4.13%	5.48%	13.72%	465
Tangipahoa Parish	95,389	33,123	27.12%	11.15%	6.13%	13.07%	31.47%	277
Tensas Parish	6,877	2,444	28.28%	16.85%	6.49%	23.50%	46.34%	170
Terrebonne Parish	102,699	33,849	29.41%	8.23%	5.37%	11.67%	24.20%	313
Union Parish	21,702	7,906	24.89%	15.76%	7.42%	10.92%	23.94%	252
Vermilion Parish	51,487	18,208	27.89%	13.08%	5.79%	11.08%	26.51%	300
Vernon Parish	53,457	16,475	26.76%	5.78%	5.77%	8.85%	18.43%	337
Washington Parish	43,406	15,631	25.67%	14.32%	8.15%	14.05%	31.56%	224
Webster Parish	42,882	16,196	24.31%	16.12%	7.52%	14.13%	25.08%	238
West Baton Rouge Parish	20,775	7,092	26.91%	9.11%	4.13%	10.82%	20.29%	418
West Carroll Parish	12,209	4,423	25.89%	15.93%	8.33%	10.56%	27.37%	220
West Feliciana Parish	13,062	2,718	18.05%	6.87%	6.52%	13.54%	33.77%	341
Winn Parish	16,807	5,967	25.07%	15.22%	7.32%	15.64%	27.48%	227

Table 2.4.4. Overall Rankings by Percentages

Parish	Population (97 estimate)	Households (97 estimate)	16&under Percent of Total	65 + Percent of Total	Mob. Lim. Percent of Total	Zero Car Percent of Total	Below Pov Percent of Total	TOTAL PERCENT RANKING
East Carroll Parish	9,086	2,934	32.73%	13.73%	7.97%	29.53%	56.82%	67
Evangeline Parish	34,397	12,004	28.23%	13.34%	8.82%	13.95%	35.12%	122
Madison Parish	13,115	4,475	30.92%	13.92%	6.87%	26.18%	44.62%	125
St. Landry Parish	83,299	28,463	28.73%	12.20%	7.95%	17.11%	36.32%	132
Avoyelles Parish	40,558	13,903	26.43%	14.90%	8.61%	14.53%	37.10%	148
Red River Parish	9,827	3,498	28.25%	15.50%	6.80%	18.82%	35.11%	152
St. Helena Parish	9,717	3,302	28.65%	12.23%	7.21%	13.55%	34.45%	156
Tensas Parish	6,877	2,444	28.28%	16.85%	6.49%	23.50%	46.34%	170
Bienville Parish	16,785	6,197	25.06%	17.79%	7.81%	16.06%	31.22%	181
Catahoula Parish	11,159	4,013	27.18%	13.31%	7.83%	14.85%	36.79%	183
Acadia Parish	57,817	19,963	28.70%	11.81%	6.64%	13.87%	30.55%	195
De Soto Parish	23,190	8,385	26.49%	14.50%	6.88%	17.25%	29.82%	200
Sabine Parish	23,885	8,833	25.77%	16.48%	8.20%	12.67%	27.10%	200
Richland Parish	20,962	7,173	27.86%	15.62%	6.59%	15.43%	33.20%	202
Franklin Parish	22,038	7,649	27.35%	15.32%	6.55%	14.22%	34.46%	219
West Carroll Parish	12,209	4,423	25.89%	15.93%	8.33%	10.56%	27.37%	220
Washington Parish	43,406	15,631	25.67%	14.32%	8.15%	14.05%	31.56%	224
Orleans Parish	474,010	179,004	24.50%	13.00%	6.83%	31.49%	31.63%	226
Winn Parish	16,807	5,967	25.07%	15.22%	7.32%	15.64%	27.48%	227
Concordia Parish	20,857	7,325	27.55%	12.48%	6.55%	17.07%	30.57%	229
Claiborne Parish	17,156	5,954	23.06%	17.67%	7.26%	17.03%	31.98%	231
Jefferson Parish	454,838	168,677	23.95%	10.13%	4.33%	9.67%	14.14%	236
Webster Parish	42,882	16,196	24.31%	16.12%	7.52%	14.13%	25.08%	238
Pointe Coupee Parish	23,285	8,011	27.69%	12.83%	6.27%	16.37%	30.34%	241
Natchitoches Parish	38,381	13,183	26.44%	13.05%	6.38%	16.19%	33.93%	247
Union Parish	21,702	7,906	24.89%	15.76%	7.42%	10.92%	23.94%	252
Assumption Parish	22,683	7,405	28.50%	10.83%	5.88%	15.91%	28.24%	259
Morehouse Parish	31,969	11,029	27.44%	14.46%	5.82%	16.39%	30.95%	265
Grant Parish	18,770	6,636	26.75%	13.60%	6.78%	9.93%	25.46%	266
Lafayette Parish	183,844	67,354	26.30%	8.28%	3.86%	9.71%	20.19%	272
St. Mary Parish	57,467	19,249	28.96%	9.45%	5.44%	14.90%	26.98%	276
St. Martin Parish	46,539	15,489	29.09%	9.14%	5.51%	14.14%	27.32%	277
Tangipahoa Parish	95,389	33,123	27.12%	11.15%	6.13%	13.07%	31.47%	277

Jackson Parish	15,467	5,668	25.27%	16.82%	6.98%	13.01%	23.86%	279
----------------	--------	-------	--------	--------	-------	--------	--------	------------

Table 2.4.4. Overall Rankings by Percentages (*continued*)

Parish	Population (97 estimate)	Households (97 estimate)	16&under Percent of Total	65 + Percent of Total	Mob. Lim. Percent of Total	Zero Car Percent of Total	Below Pov Percent of Total	TOTAL PERCENT RANKING
St. James Parish	20,972	6,493	28.90%	9.77%	5.21%	17.74%	25.51%	281
Vermilion Parish	51,487	18,208	27.89%	13.08%	5.79%	11.08%	26.51%	300
Caldwell Parish	10,324	3,760	25.19%	15.23%	6.22%	11.13%	28.79%	312
Terrebonne Parish	102,699	33,849	29.41%	8.23%	5.37%	11.67%	24.20%	313
Caddo Parish	244,690	91,624	25.56%	13.32%	5.78%	13.81%	24.03%	318
Iberia Parish	72,084	24,201	29.16%	10.56%	5.02%	12.33%	25.83%	323
Iberville Parish	30,893	9,841	26.61%	10.92%	4.61%	16.90%	27.98%	325
East Feliciana Parish	20,996	6,090	26.67%	10.79%	5.68%	11.47%	25.03%	328
Allen Parish	23,996	8,047	25.38%	12.84%	5.69%	12.94%	29.95%	331
Rapides Parish	125,753	43,763	26.01%	11.99%	6.14%	12.21%	22.56%	332
Vernon Parish	53,457	16,475	26.76%	5.78%	5.77%	8.85%	18.43%	337
West Feliciana Parish	13,062	2,718	18.05%	6.87%	6.52%	13.54%	33.77%	341
Ouachita Parish	147,753	52,508	26.11%	11.30%	5.21%	12.44%	24.67%	357
St. John the Baptist Parish	42,472	13,454	31.15%	7.02%	3.84%	11.22%	17.95%	367
Livingston Parish	84,620	28,717	28.05%	8.27%	5.15%	5.98%	14.62%	393
Plaquemines Parish	25,902	8,327	28.23%	7.76%	4.16%	12.38%	22.63%	394
Beauregard Parish	31,902	10,968	26.37%	10.78%	5.25%	8.78%	18.29%	398
Ascension Parish	69,300	22,847	28.61%	8.04%	4.44%	9.63%	17.70%	402
La Salle Parish	13,852	5,159	24.04%	15.64%	8.73%	9.44%	21.17%	417
West Baton Rouge Parish	20,775	7,092	26.91%	9.11%	4.13%	10.82%	20.29%	418
Calcasieu Parish	180,320	64,645	26.41%	10.76%	4.95%	9.30%	18.48%	420
St. Charles Parish	47,577	15,993	28.76%	7.20%	3.84%	8.80%	15.18%	428
Cameron Parish	8,671	2,914	27.47%	9.68%	3.99%	7.42%	16.24%	429
St. Bernard Parish	66,631	23,177	24.26%	11.31%	5.20%	8.65%	14.93%	438
Lafourche Parish	88,003	29,826	26.85%	9.29%	4.18%	10.84%	22.87%	451
Bossier Parish	92,781	33,246	26.36%	9.01%	3.99%	7.91%	16.22%	460
St. Tammany Parish	182,636	63,683	27.37%	8.92%	4.13%	5.48%	13.72%	465
Lincoln Parish	42,203	13,843	20.59%	10.71%	3.60%	11.41%	26.58%	472
Jefferson Davis Parish	31,883	11,043	27.72%	12.74%	6.63%	11.45%	27.29%	480
East Baton Rouge Parish	396,692	144,588	24.63%	9.15%	3.76%	9.20%	19.69%	496

Table 2.4.5. Transportation Need Ranking by Parish

Parish Name	Density Rankings	Percent Ranking	Total Ranking
Orleans Parish	5	119	124
St. Landry Parish	68	65	133
Acadia Parish	89	116	205
Caddo Parish	25	180	205
Tangipahoa Parish	60	149	209
Evangeline Parish	139	73	212
Washington Parish	116	113	229
Avoyelles Parish	148	82	230
Ouachita Parish	30	202	232
Iberia Parish	63	172	235
St. Mary Parish	88	150	238
St. James Parish	99	144	243
Webster Parish	107	138	245
East Carroll Parish	219	31	250
Assumption Parish	122	130	252
Richland Parish	182	86	268
Ascension Parish	38	234	272
St. John the Baptist Parish	47	225	272
Rapides Parish	82	197	279
Lafayette Parish	20	261	281
Franklin Parish	189	96	285
Jefferson Parish	10	275	285
Morehouse Parish	176	109	285
Calcasieu Parish	47	241	288
East Baton Rouge Parish	15	278	293
Pointe Coupee Parish	178	117	295
Madison Parish	253	46	299
Red River Parish	241	60	301
St. Martin Parish	153	152	305
Jefferson Davis Parish	165	147	312
Terrebonne Parish	127	186	313
De Soto Parish	213	101	314
St. Charles Parish	73	249	322
Concordia Parish	217	110	327
St. Bernard Parish	64	263	327
Iberville Parish	167	164	331
St. Tammany Parish	68	267	335
Natchitoches Parish	219	118	337

Table 2.4.5. Transportation Need Ranking by Parish (*continued*)

Parish Name	Density Rankings	Percent Ranking	Total Ranking
West Carroll Parish	202	135	337
West Baton Rouge Parish	101	238	339
Vermilion Parish	185	161	346
Claiborne Parish	251	102	353
St. Helena Parish	255	98	353
Tensas Parish	303	52	355
Sabine Parish	235	123	358
Lafourche Parish	132	229	361
Lincoln Parish	117	247	364
Livingston Parish	119	249	368
Bienville Parish	273	98	371
Jackson Parish	235	148	383
Catahoula Parish	301	87	388
Bossier Parish	122	275	397
East Feliciana Parish	203	196	399
Grant Parish	251	164	415
Winn Parish	299	125	424
Allen Parish	252	173	425
Union Parish	268	165	433
La Salle Parish	276	174	450
Caldwell Parish	300	165	465
Vernon Parish	236	246	482
Plaquemines Parish	268	216	484
West Feliciana Parish	288	196	484
Beauregard Parish	286	241	527
Cameron Parish	320	251	571

Figure 2.4.2 placeholder

Figure 2.4.3 placeholder

Welfare To Work Transportation Needs

Transportation services are needed to support welfare reform programs. Nationwide implementation of the Temporary Assistance for Needy Families (TANF) Program and the companion Welfare to Work (WtW) Program must address the transportation services that will enable the basic objectives of these statutes to be attained. Transportation has a crucial role to play to make welfare reform work. Some communities and states have already developed apparently successful transportation approaches for welfare reform transportation services.

There are highly challenging requirements inherent in the TANF and WtW programs, and the equally challenging requirements of transportation to provide access to these programs. There are spatial mismatches (many welfare recipients not living near jobs) and temporal mismatches (many welfare recipients going into jobs that require late night and weekend shifts); both of these mismatches make transportation to work sites difficult to provide. Additional transportation challenges are the typical need for multiple destinations (to access child care as well as jobs or job training) and the changing destinations over time (as welfare recipients move from job training to actual jobs).

These challenges are magnified in rural areas. Many rural areas have high percentages of households on AFDC rolls, high rates of poverty, and high rates of unemployment. Nearly half of the rural counties in the United States do not have any public transportation services at all, and these services do not meet many travel needs in many other communities. In Louisiana, 38 of the State's 64 parishes have public transit services.

Because of these considerations, welfare reform transportation must also be addressed in a comprehensive review of Louisiana's transit needs.

Transportation Needs For Welfare To Work Populations

As noted, those persons who are or will be involved in welfare to work programs have significant mobility needs. Once again, this is often due to their inability to afford an automobile or their inability to operate one.

We developed a Welfare to Work Transportation Needs Ranking based on a composite of several demographic and community measures. Demographic and socioeconomic data were collected and analyzed for the State of Louisiana at the parish level from the 1990 U.S. Census (with updated 1995 population figures) to help determine the number and percentage of persons that are likely to need transportation to work, and which geographic areas have high concentrations of welfare to work transportation needs.

For this study, welfare to work transportation needs were defined in terms of the

following target population groups:

- 1) job growth (or the lack of it) in the community from 1980 to 1994,
- 2) the growth in the number of AFDC payments/recipients from 1980 to 1994,
- 3) persons receiving TANF payments in 1994,
- 4) autoless households, and
- 5) the 1994 unemployment rate for the community.

Information on each of these factors was compiled for each of the 64 parishes in Louisiana. We found substantial numbers of persons in these categories in Louisiana.

Once again, the information on the number of persons in each category does not by itself provide a measure of the **number of trips** that these persons might take (referred to as their “potential demand”), but this information is most useful as means of developing a ranking to determine **which parts of the State have the highest relative need for welfare to work transportation.**

Individual Factors

As a number of these are useful by themselves in expressing needs for welfare to work transportation, we felt it would be useful to examine these. We’ll look at areas of high unemployment, areas with concentrations of welfare payments, and areas of job growth.

Areas of High Unemployment

Figure 2.4.4 shows the parishes in Louisiana that occupy the top quartile of unemployment rates, at 10.9% or higher. West Carroll, at 21.6%, has the highest unemployment rate in the state, and is surrounded by five other parishes in the top quartile: East Carroll (18.78%), Morehouse (13.29%), Richland (12.91%) and Madison (13.3%). This northeastern corner represents a problem area in the state, with an average unemployment rate of 16%, nearly twice the statewide average of 9.5%.

Another problem area of unemployment exists in the central part of the state, including the parishes of Catahoula (11.1%), Concordia (13.02%), Avoyelles (12.01%), Point Coupee (12.3%), Iberville (12.93%), and St. Landry (11.13%). By itself, a single parish with a high level of unemployment does not present a serious problem, as job-seekers can usually find work in a surrounding area. However, these large pockets of unemployment represent a serious problem for job-seekers, as they must travel greater distances to the areas in which there are jobs.

Figure 2.4.4 placeholder

Areas with High Concentrations of Welfare Payments

Figure 2.4.5 shows the parishes in Louisiana that occupy the top quartile in terms of the percentage of a parish's population receiving TANF (Temporary Assistance to Needy Families) payments. Again, we see a large problem area in the northeast corner of the state. East Carroll, at 23.28%, has the highest welfare rate of any parish in Louisiana, and is surrounded by five other parishes in the top quartile: Madison (16.6%), Tensas (14.22%), Franklin (8.22%), Richland (10.1%), Morehouse (9.09%). This concentration of welfare dependence in the northeastern corner of the state, along with the unemployment problems discussed above, presents a high priority for transit service in these parishes. If welfare recipients are to be moved to employment and self-sufficiency, many will be in need of transportation (and in many cases, inter-county transportation).

Other areas of high welfare-dependence include Orleans parish (20.84%), Plaquemines parish (9.28%), St. James parish (9.22%), St. Mary parish (8.39%), Iberville parish (9.84%), East Feliciana parish (8.64%), St. Landry parish (10.19%), Evangeline parish (9.14%), Natchitoches parish (8.99%) and De Soto parish (8.64%). The good news is that, with the exception of Orleans, Plaquemines, and Iberville, all of these parishes are served by Section 5311 transit systems, which provides for the possibility of employment transportation.

Areas of Job Growth

Figure 2.4.6 shows the parishes in Louisiana that have experienced a 20% or higher increase in total employment from 1980 to 1994. These are the parishes that should be considered as potential employment centers for persons who are currently unemployed or receiving welfare payments. Transit should play a large role in this process. A well-designed inter-county transit system, such as the DARTS system in Clarksdale, Mississippi, can connect employers with potential employees, providing benefits for all involved.

The majority of job-growth in the state of Louisiana is located in the southeastern area of the state, in the area between New Orleans and Baton Rouge, centered around Livingston parish. This would follow the growth model of the 1980s, with development activity occurring in the outlying counties surrounding metropolitan areas. Since 1980, over 170,000 jobs have been created in this area.

St. Tammany parish has seen the highest employment growth from 1980 to 1994 (101.9%) of any parish in the state. Much of this is due to the out-migration from New Orleans, and is probably centered in the area of Slidell. Livingston Parish is close behind at 96.19%, followed by Ascension Parish (65.28%), St. John the Baptist (45.05%), West Baton Rouge (42.72%) and Tangipahoa (40.47%). Jefferson parish, another of the parishes in the New Orleans MSA, has seen a 23.07% increase in total employment since 1980, an increase of nearly 45,000 jobs, most of which has centered around the area of Kenner and Metairie. East Baton Rouge parish has seen the largest numerical increase in total employment of any

parish, with over 53,00 jobs created since 1980.

The three-parish area of Union, Lincoln and Ouachita has also seen significant job-growth since 1980, with over 18,000 jobs created. Bossier parish has seen an increase of over 10,000 jobs since 1980, much of which is probably related to the gambling industry.

Figure 2.4.5 placeholder

Figure 2.4.6 placeholder

Identification of High Need Areas

Ranking Procedures

To identify which parts of Louisiana have the highest relative transportation needs in terms of welfare to work transportation, data were collected on all parishes in the State on each of the five factors listed above. The parishes were ranked twice from highest need to least need on each of these five factors: once to identify areas with **relatively high numbers** of persons with welfare to work transportation needs (per square mile), and the second time to identify areas with **relatively high percentages** of persons with welfare to work transportation needs. After determining areas with the most transportation needs in terms of population density and in terms of percentages, we ranked the parishes again, this time according to the sum of the two previous rankings so as to produce one overall measure of areas with relatively high welfare to work transportation needs. These rankings are useful for identifying the portions of State that can be considered to be “high need” areas for transportation services because of the characteristics that indicate welfare to work transportation needs.

Parishes with High Numbers of Welfare to Work Transportation Needs

The same procedures were applied as before. For each parish, the numbers of persons having each of the five welfare to work transportation needs characteristics were identified. To correct for biases involving parishes of substantially different sizes, the total population measures were converted to measures of **density** for each transportation need characteristic. For each of the transportation need characteristics, the parishes in the State were then ranked in order relative to the other parishes in the State. The rankings of each of the five need characteristics were then summed, and the parishes were re-ranked. This produced an overall ranking of parishes in terms of the total population density of welfare to work transportation needs, which is shown in Table 2.4.6. For these rankings, the lower scores once again represent the areas with the greater needs.

The relative need was next divided into four categories: greatest need (the top 1/4), second need, third need, and least need. This information is shown in Table 2.4.7.

These four aggregate need categories were then mapped, and the results are shown in Figure 2.4.7.

Parishes with High Percentages of Welfare to Work Transportation Needs

The process was then repeated, this time using the **percentage** of the total population of each parish with transit dependent characteristics. The results are shown in Table 2.4.8. Once again, the relative need was next divided into four categories: greatest need (the top 1/4), second need, third need, and least need. Table 2.4.9 summarizes the overall rankings by percentages of the population in need. These results are shown in Figure 2.4.8.

Parishes with Combinations of High Need Densities and Percentages

The total overall density-based ranking was then added to the total overall percentage-based ranking to create a combined ranking. The resulting combined rankings are shown in Table 2.4.10, and are mapped in Figure 2.4.9.

Table 2.4.6. Welfare to Work Transportation Need Statistics by Parish, Population Density

Parish Name	Population 1997 (Est.)	Land Area (Squ. Miles)	Employment Growth, 1980-94 Density	AFDC Growth 1980-94 Density	Zero Car Household Density	Welfare Payments, 1994 Density	Unemployment Density	Total of Density Based Rankings
ACADIA	57,817	655	37	14	17	18	22	108
ALLEN	23,996	765	40	42	47	47	42	218
ASCENSION	69,300	292	61	6	7	7	6	87
ASSUMPTION	22,683	339	4	19	21	26	24	94
AVOYELLES	40,558	833	38	41	32	33	28	172
BEAUREGARD	31,902	1,160	45	37	60	60	48	250
BIENVILLE	16,785	811	35	33	54	51	56	229
BOSSIER	92,781	839	54	17	28	29	21	149
CADDO	244,690	882	47	4	5	5	5	66
CALCASIEU	180,320	1,071	53	13	10	14	11	101
CALDWELL	10,324	530	32	48	62	62	55	259
CAMERON	8,671	1,313	16	57	64	64	64	265
CATAHOULA	11,159	704	17	52	61	61	59	250
CLAIBORNE	17,156	755	18	47	48	49	53	215
CONCORDIA	20,857	696	11	53	40	44	39	187
DE SOTO	23,190	877	21	30	45	46	51	193
EAST BATON ROUGE	396,692	456	63	3	3	3	4	76
EAST CARROLL	9,086	422	8	59	35	22	37	161
EAST FELICIANA	20,996	453	42	36	39	27	36	180
EVANGELINE	34,397	664	41	43	31	24	35	174
FRANKLIN	22,038	623	43	60	41	38	41	223
GRANT	18,770	645	33	35	56	55	40	219
IBERIA	72,084	575	13	10	11	11	15	60
IBERVILLE	30,893	619	9	50	29	23	26	137
JACKSON	15,467	570	23	58	52	54	58	245
JEFFERSON DAVIS	31,883	652	10	34	37	41	44	166
JEFFERSON	454,838	306	64	2	2	2	2	72
LA SALLE	13,852	624	14	51	63	58	61	247
LAFAYETTE	183,844	270	62	5	4	4	3	78
LAFOURCHE	88,003	1,085	30	11	27	36	34	138
LINCOLN	42,203	471	52	20	22	20	46	160
LIVINGSTON	84,620	648	56	24	30	37	12	159
MADISON	13,115	624	19	63	38	34	47	201
MOREHOUSE	31,969	794	27	62	34	32	30	185
NATCHITOCHES	38,381	1,256	31	26	42	42	52	193

Table 2.4.6. Welfare to Work Transportation Need Statistics by Parish, Population Density (*continued*)

Parish Name	Population 1997 (Est.)	Land Area (Squ. Miles)	Employment Growth, 1980-94 Density	AFDC Growth 1980-94 Density	Zero Car Household Density	Welfare Payments, 1994 Density	Unemployment Density	Total of Density Based Rankings
ORLEANS	474,010	181	1	1	1	1	1	5
OUACHITA	147,753	611	59	7	6	6	8	86
PLAQUEMINES	25,902	845	3	21	49	40	50	163
POINTE COUPEE	23,285	557	28	56	33	35	32	184
RAPIDES	125,753	1,323	49	22	20	19	25	135
RED RIVER	9,827	389	22	55	44	48	49	218
RICHLAND	20,962	559	20	32	36	30	33	151
SABINE	23,885	865	39	40	53	56	57	245
ST. BERNARD	66,631	465	50	9	16	17	14	106
ST. CHARLES	47,577	284	48	29	14	16	13	120
ST. HELENA	9,717	408	25	64	55	50	54	248
ST. JAMES	20,972	246	5	16	13	13	16	63
ST. JOHN THE BAPTIST	42,472	219	58	8	8	8	7	89
ST. LANDRY	83,299	929	24	15	12	10	18	79
ST. MARTIN	46,539	740	51	38	26	39	29	183
ST. MARY	57,467	613	2	12	15	12	19	60
ST. TAMMANY	182,636	854	60	25	19	25	10	139
TANGIPAHOA	95,389	790	55	27	9	9	9	109
TENSAS	6,877	603	15	61	59	53	62	250
TERREBONNE	102,699	1,255	6	18	24	28	31	107
UNION	21,702	878	44	45	58	63	60	270
VERMILION	51,487	1,174	26	23	43	45	43	180
VERNON	53,457	1,329	36	49	51	59	38	233
WASHINGTON	43,406	670	46	28	25	21	27	147
WEBSTER	42,882	596	29	31	23	31	20	134
WEST BATON ROUGE	20,775	191	57	39	18	15	17	146
WEST CARROLL	12,209	359	12	54	50	52	23	191
WEST FELICIANA	13,062	406	7	46	46	43	45	187
WINN	16,807	951	34	44	57	57	63	255

Table 2.4.7. Welfare to Work Transportation Need Statistics by Parish, Population Density – Sorted by Ranking

Parish Name	Population 1997 (Est.)	Land Area (Squ. Miles)	Employment Growth, 1980-94 Density	AFDC Growth 1980-94 Density	Zero Car Household Density	Welfare Payments, 1994 Density	Unemployment Density	Total of Density Based Rankings
ORLEANS	474,010	181	1	1	1	1	1	5
IBERIA	72,084	575	13	10	11	11	15	60
ST. MARY	57,467	613	2	12	15	12	19	60
ST. JAMES	20,972	246	5	16	13	13	16	63
CADDO	244,690	882	47	4	5	5	5	66
JEFFERSON	454,838	306	64	2	2	2	2	72
EAST BATON ROUGE	396,692	456	63	3	3	3	4	76
LAFAYETTE	183,844	270	62	5	4	4	3	78
ST. LANDRY	83,299	929	24	15	12	10	18	79
OUACHITA	147,753	611	59	7	6	6	8	86
ASCENSION	69,300	292	61	6	7	7	6	87
ST. JOHN THE BAPTIST	42,472	219	58	8	8	8	7	89
ASSUMPTION	22,683	339	4	19	21	26	24	94
CALCASIEU	180,320	1,071	53	13	10	14	11	101
ST. BERNARD	66,631	465	50	9	16	17	14	106
TERREBONNE	102,699	1,255	6	18	24	28	31	107
ACADIA	57,817	655	37	14	17	18	22	108
TANGIPAHOA	95,389	790	55	27	9	9	9	109
ST. CHARLES	47,577	284	48	29	14	16	13	120
WEBSTER	42,882	596	29	31	23	31	20	134
RAPIDES	125,753	1,323	49	22	20	19	25	135
IBERVILLE	30,893	619	9	50	29	23	26	137
LAFOURCHE	88,003	1,085	30	11	27	36	34	138
ST. TAMMANY	182,636	854	60	25	19	25	10	139
WEST BATON ROUGE	20,775	191	57	39	18	15	17	146
WASHINGTON	43,406	670	46	28	25	21	27	147
BOSSIER	92,781	839	54	17	28	29	21	149
RICHLAND	20,962	559	20	32	36	30	33	151
LIVINGSTON	84,620	648	56	24	30	37	12	159
LINCOLN	42,203	471	52	20	22	20	46	160
EAST CARROLL	9,086	422	8	59	35	22	37	161
PLAQUEMINES	25,902	845	3	21	49	40	50	163
JEFFERSON DAVIS	31,883	652	10	34	37	41	44	166

AVOYELLES	40,558	833	38	41	32	33	28	172
-----------	--------	-----	----	----	----	----	----	-----

Table 2.4.7. Welfare to Work Transportation Need Statistics by Parish, Population Density – Sorted by Ranking (*continued*)

Parish Name	Population 1997 (Est.)	Land Area (Squ. Miles)	Employment Growth, 1980-94 Density	AFDC Growth 1980-94 Density	Zero Car Household Density	Welfare Payments, 1994 Density	Unemployment Density	Total of Density Based Rankings
EVANGELINE	34,397	664	41	43	31	24	35	174
EAST FELICIANA	20,996	453	42	36	39	27	36	180
VERMILION	51,487	1,174	26	23	43	45	43	180
ST. MARTIN	46,539	740	51	38	26	39	29	183
POINTE COUPEE	23,285	557	28	56	33	35	32	184
MOREHOUSE	31,969	794	27	62	34	32	30	185
CONCORDIA	20,857	696	11	53	40	44	39	187
WEST FELICIANA	13,062	406	7	46	46	43	45	187
WEST CARROLL	12,209	359	12	54	50	52	23	191
DE SOTO	23,190	877	21	30	45	46	51	193
NATCHITOCHES	38,381	1,256	31	26	42	42	52	193
MADISON	13,115	624	19	63	38	34	47	201
CLAIBORNE	17,156	755	18	47	48	49	53	215
ALLEN	23,996	765	40	42	47	47	42	218
RED RIVER	9,827	389	22	55	44	48	49	218
GRANT	18,770	645	33	35	56	55	40	219
FRANKLIN	22,038	623	43	60	41	38	41	223
BIENVILLE	16,785	811	35	33	54	51	56	229
VERNON	53,457	1,329	36	49	51	59	38	233
JACKSON	15,467	570	23	58	52	54	58	245
SABINE	23,885	865	39	40	53	56	57	245
LA SALLE	13,852	624	14	51	63	58	61	247
ST. HELENA	9,717	408	25	64	55	50	54	248
BEAUREGARD	31,902	1,160	45	37	60	60	48	250
CATAHOULA	11,159	704	17	52	61	61	59	250
TENSAS	6,877	603	15	61	59	53	62	250
WINN	16,807	951	34	44	57	57	63	255
CALDWELL	10,324	530	32	48	62	62	55	259
CAMERON	8,671	1,313	16	57	64	64	64	265
UNION	21,702	878	44	45	58	63	60	270

Figure 2.4.7 Placeholder

Table 2.4.8. Welfare to Work Transportation Need Statistics by Parish, Percentage Based

Parish Name	Population 1997 (Est.)	Land Area (Squ. Miles)	Employment Growth % 1980-94	AFDC Growth 1980-94 %	Zero Car Household % of Total	Welfare Payments, 1994 % of Total	Unemployment % of Total	Total of Percentage Rankings
ACADIA	57,817	655	34	19	27	30	57	167
ALLEN	23,996	765	54	41	33	39	11	178
ASCENSION	69,300	292	62	5	53	36	43	199
ASSUMPTION	22,683	339	1	16	16	35	46	114
AVOYELLES	40,558	833	36	48	21	29	63	197
BEAUREGARD	31,902	1,160	55	13	59	55	61	243
BIENVILLE	16,785	811	46	9	15	21	17	108
BOSSIER	92,781	839	56	6	61	59	25	207
CADDO	244,690	882	29	11	28	25	55	148
CALCASIEU	180,320	1,071	38	25	55	52	58	228
CALDWELL	10,324	530	39	34	44	43	54	214
CAMERON	8,671	1,313	5	64	62	63	29	223
CATAHOULA	11,159	704	14	50	20	33	4	121
CLAIBORNE	17,156	755	17	42	10	24	8	101
CONCORDI	20,857	696	7	53	9	20	39	128
DE SOTO	23,190	877	21	18	7	14	26	86
EAST BATON ROUGE	396,692	456	53	12	56	32	21	174
EAST CARROLL	9,086	422	3	57	2	1	41	104
EAST FELICIANA	20,996	453	45	45	40	13	16	159
EVANGELINE	34,397	664	44	49	26	10	44	173
FRANKLIN	22,038	623	48	59	22	16	30	175
GRANT	18,770	645	43	17	50	48	32	190
IBERIA	72,084	575	19	14	37	37	53	160
IBERVILLE	30,893	619	16	52	11	7	34	120
JACKSON	15,467	570	24	58	32	41	19	174
JEFFERSON DAVIS	31,883	652	13	31	41	53	14	152
JEFFERSON	454,838	306	51	8	52	42	9	162
LA SALLE	13,852	624	12	46	54	60	6	178
LAFAYETTE	183,844	270	47	21	51	57	49	225
LAFOURCHE	88,003	1,085	26	1	47	44	45	163
LINCOLN	42,203	471	49	23	42	38	42	194
LIVINGSTON	84,620	648	63	15	63	62	1	204
MADISON	13,115	624	18	61	3	3	37	122

MOREHOUSE	31,969	794	28	60	12	11	22	133
-----------	--------	-----	----	----	----	----	----	-----

Table 2.4.8. Welfare to Work Transportation Need Statistics by Parish, Percentage Based (*continued*)

Parish Name	Population 1997 (Est.)	Land Area (Squ. Miles)	Employment Growth % 1980-94	AFDC Growth 1980-94 %	Zero Car Household % of Total	Welfare Payments, 1994 % of Total	Unemployment % of Total	Total of Percentage Rankings
NATCHITOCHES	38,381	1,256	33	10	14	12	52	121
ORLEANS	474,010	181	11	29	1	2	13	56
OUACHITA	147,753	611	50	24	35	31	64	204
PLAQUEMINES	25,902	845	4	3	36	8	51	102
POINTE COUPEE	23,285	557	31	55	13	18	2	119
RAPIDES	125,753	1,323	37	30	38	40	50	195
RED RIVER	9,827	389	23	56	5	27	60	171
RICHLAND	20,962	559	20	39	18	6	27	110
SABINE	23,885	865	52	28	34	47	10	171
ST. BERNARD	66,631	465	41	2	60	54	24	181
ST. CHARLES	47,577	284	32	43	58	56	59	248
ST. HELENA	9,717	408	30	63	29	28	33	183
ST. JAMES	20,972	246	8	32	6	9	47	102
ST. JOHN THE BAPTIST	42,472	219	61	20	43	26	31	181
ST. LANDRY	83,299	929	22	35	8	5	12	82
ST. MARTIN	46,539	740	57	44	23	51	18	193
ST. MARY	57,467	613	2	22	19	15	7	65
ST. TAMMANY	182,636	854	64	27	64	64	62	281
TANGIPAHOA	95,389	790	59	47	31	17	56	210
TENSAS	6,877	603	6	62	4	4	20	96
TERREBONNE	102,699	1,255	15	7	39	49	15	125
UNION	21,702	878	58	26	46	58	23	211
VERMILION	51,487	1,174	25	4	45	45	48	167
VERNON	53,457	1,329	35	37	57	61	28	218
WASHINGTON	43,406	670	40	38	25	22	3	128
WEBSTER	42,882	596	27	33	24	46	40	170
WEST BATON ROUGE	20,775	191	60	51	48	34	5	198
WEST CARROLL	12,209	359	9	54	49	50	36	198
WEST FELICIANA	13,062	406	10	40	30	19	35	134
WINN	16,807	951	42	36	17	23	38	156

Table 2.4.9. Welfare to Work Transportation Need Statistics by Parish, Percentage Based – Sorted by Ranking

Parish Name	Population 1997 (Est.)	Land Area (Squ. Miles)	Employment Growth % 1980-94	AFDC Growth 1980-94 %	Zero Car Household % of Total	Welfare Payments, 1994 % of Total	Unemployment % of Total	Total of Percentage Rankings
ORLEANS	474,010	181	11	29	1	2	13	56
ST. MARY	57,467	613	2	22	19	15	7	65
ST. LANDRY	83,299	929	22	35	8	5	12	82
DE SOTO	23,190	877	21	18	7	14	26	86
TENSAS	6,877	603	6	62	4	4	20	96
CLAIBORNE	17,156	755	17	42	10	24	8	101
PLAQUEMINES	25,902	845	4	3	36	8	51	102
ST. JAMES	20,972	246	8	32	6	9	47	102
EAST CARROLL	9,086	422	3	57	2	1	41	104
BIENVILLE	16,785	811	46	9	15	21	17	108
RICHLAND	20,962	559	20	39	18	6	27	110
ASSUMPTION	22,683	339	1	16	16	35	46	114
POINTE COUPEE	23,285	557	31	55	13	18	2	119
IBERVILLE	30,893	619	16	52	11	7	34	120
CATAHOULA	11,159	704	14	50	20	33	4	121
NATCHITOCHES	38,381	1,256	33	10	14	12	52	121
MADISON	13,115	624	18	61	3	3	37	122
TERREBONNE	102,699	1,255	15	7	39	49	15	125
CONCORDIA	20,857	696	7	53	9	20	39	128
WASHINGTON	43,406	670	40	38	25	22	3	128
MOREHOUSE	31,969	794	28	60	12	11	22	133
WEST FELICIANA	13,062	406	10	40	30	19	35	134
CADDO	244,690	882	29	11	28	25	55	148
JEFFERSON DAVIS	31,883	652	13	31	41	53	14	152
WINN	16,807	951	42	36	17	23	38	156
EAST FELICIANA	20,996	453	45	45	40	13	16	159
IBERIA	72,084	575	19	14	37	37	53	160
JEFFERSON	454,838	306	51	8	52	42	9	162
LAFOURCHE	88,003	1,085	26	1	47	44	45	163
ACADIA	57,817	655	34	19	27	30	57	167
VERMILION	51,487	1,174	25	4	45	45	48	167
WEBSTER	42,882	596	27	33	24	46	40	170
RED RIVER	9,827	389	23	56	5	27	60	171

SABINE	23,885	865	52	28	34	47	10	171
--------	--------	-----	----	----	----	----	----	-----

Table 2.4.9. Welfare to Work Transportation Need Statistics by Parish, Percentage Based – Sorted by Ranking

Parish Name	Population 1997 (Est.)	Land Area (Squ. Miles)	Employment Growth % 1980-94	AFDC Growth 1980-94 %	Zero Car Household % of Total	Welfare Payments, 1994 % of Total	Unemployment % of Total	Total of Percentage Rankings
EVANGELINE	34,397	664	44	49	26	10	44	173
EAST BATON ROUGE	396,692	456	53	12	56	32	21	174
JACKSON	15,467	570	24	58	32	41	19	174
FRANKLIN	22,038	623	48	59	22	16	30	175
ALLEN	23,996	765	54	41	33	39	11	178
LA SALLE	13,852	624	12	46	54	60	6	178
ST. BERNARD	66,631	465	41	2	60	54	24	181
ST. JOHN THE BAPTIST	42,472	219	61	20	43	26	31	181
ST. HELENA	9,717	408	30	63	29	28	33	183
GRANT	18,770	645	43	17	50	48	32	190
ST. MARTIN	46,539	740	57	44	23	51	18	193
LINCOLN	42,203	471	49	23	42	38	42	194
RAPIDES	125,753	1,323	37	30	38	40	50	195
AVOYELLES	40,558	833	36	48	21	29	63	197
WEST BATON ROUGE	20,775	191	60	51	48	34	5	198
WEST CARROLL	12,209	359	9	54	49	50	36	198
ASCENSION	69,300	292	62	5	53	36	43	199
LIVINGSTON	84,620	648	63	15	63	62	1	204
OUACHITA	147,753	611	50	24	35	31	64	204
BOSSIER	92,781	839	56	6	61	59	25	207
TANGIPAHOA	95,389	790	59	47	31	17	56	210
UNION	21,702	878	58	26	46	58	23	211
CALDWELL	10,324	530	39	34	44	43	54	214
VERNON	53,457	1,329	35	37	57	61	28	218
CAMERON	8,671	1,313	5	64	62	63	29	223
LAFAYETTE	183,844	270	47	21	51	57	49	225
CALCASIEU	180,320	1,071	38	25	55	52	58	228
BEAUREGARD	31,902	1,160	55	13	59	55	61	243
ST. CHARLES	47,577	284	32	43	58	56	59	248
ST. TAMMANY	182,636	854	64	27	64	64	62	281

Figure 2.4.8 Placeholder

Table 2.4.10. Combined Density and Percentage Rankings

Parish Name	Percentage Based Ranking	Density Based Ranking	Combination of Percentage and Density Rankings
ORLEANS	56	5	61
ST. MARY	65	60	125
ST. LANDRY	82	79	161
ST. JAMES	102	63	165
ASSUMPTION	114	94	208
CADDO	148	66	214
IBERIA	160	60	220
TERREBONNE	125	107	232
JEFFERSON	162	72	234
EAST BATON ROUGE	174	76	250
IBERVILLE	120	137	257
RICHLAND	110	151	261
EAST CARROLL	104	161	265
PLAQUEMINES	102	163	265
ST. JOHN THE BAPTIST	181	89	270
ACADIA	167	108	275
WASHINGTON	128	147	275
DE SOTO	86	193	279
ASCENSION	199	87	286
ST. BERNARD	181	106	287
OUACHITA	204	86	290
LAFOURCHE	163	138	301
LAFAYETTE	225	78	303
POINTE COUPEE	119	184	303
WEBSTER	170	134	304
NATCHITOCHES	121	193	314
CONCORDIA	128	187	315
CLAIBORNE	101	215	316
JEFFERSON DAVIS	152	166	318
MOREHOUSE	133	185	318
TANGIPAHOA	210	109	319
WEST FELICIANA	134	187	321
MADISON	122	201	323
CALCASIEU	228	101	329
RAPIDES	195	135	330
BIENVILLE	108	229	337
EAST FELICIANA	159	180	339
WEST BATON ROUGE	198	146	344
TENSAS	96	250	346
EVANGELINE	173	174	347
VERMILION	167	180	347
LINCOLN	194	160	354
BOSSIER	207	149	356
LIVINGSTON	204	159	363
ST. CHARLES	248	120	368
AVOYELLES	197	172	369
CATAHOULA	121	250	371
ST. MARTIN	193	183	376

Table 2.4.10. Combined Density and Percentage Rankings (*continued*)

Parish Name	Percentage Based Ranking	Density Based Ranking	Combination of Percentage and Density Rankings
WEST CARROLL	198	191	389
ALLEN	178	218	396
FRANKLIN	175	223	398
GRANT	190	219	409
WINN	156	255	411
SABINE	171	245	416
JACKSON	174	245	419
ST. TAMMANY	281	139	420
LA SALLE	178	247	425
ST. HELENA	183	248	431
VERNON	218	233	451
CALDWELL	214	259	473
UNION	211	270	481
CAMERON	223	265	488
BEAUREGARD	243	250	493

Figure 2.4.9 Placeholder

Discussion of Results

Parishes with High Numbers of Persons with Welfare to Work Transportation Needs

The densities of persons having each of the five transportation need characteristics produced the results that were previously shown in Figure 2.4.7. The needs expressed on a per square mile basis (density-based rankings) follow very closely the population distribution of the State, with higher need areas associated with higher populations. The south central portion of the state is prominent in this display, including New Orleans and Baton Rouge. Parishes that include Lake Charles, Monroe, and Shreveport also have high numbers of persons with welfare to work transportation needs. St. Landry, Jefferson Davis, and Iberia were among the rural parishes with high numbers of persons with welfare to work transportation needs.

Parishes with High Percentages of Persons with Welfare to Work Transportation Needs

Rankings based on the percentages persons having each of the five transportation need characteristics were shown in Figure 2.4.8. The percentage based rankings show the highest need areas in the northeast and northwest sections of the State, in a central area of the State, and in the southeastern corner in Plaquemines Parish.

Parishes with Combinations of High Need Densities and Percentages

The combination of the densities and the percentages of persons having each of the five transportation need characteristics was previously shown in Figure 2.4.9. In effect, equal weights are being given to the density rankings and the percentage rankings in their combination. (Other weightings are possible but are difficult to justify from a conceptual standpoint.)

The combined density and percentage rankings of persons with welfare to work transportation needs in Louisiana show a mixture of urban and rural parishes in the highest need category. Orleans Parish is the highest need parish, followed by four rural parishes: St. Mary, St. Landry, St. James, and Assumption. Caddo, Terrebonne, Jefferson, and East Baton Rouge are among the other urban parishes; other rural parishes include Iberia, Iberville, East Carroll, and Richland. The southern portion of the State has the greatest number of parishes with high welfare to work transportation needs.

Assessment Of These Needs

The combination of these factors – transit dependent populations and welfare reform transportation needs – provides a comprehensive description of the high-priority potential sites for additional transportation services on a parish by parish

basis. The results of this combination, which are shown in Table 2.4.11 and Figure 2.4.10, are similar to those just discussed: the high need parishes are a mixture of rural and urban areas, starting with Orleans Parish as the highest need parish, and followed by the rural parishes of St. Mary, St. Landry, and St. James. Caddo is next, followed by Iberia, Assumption, Acadia, Washington, and East Carroll. Five of the top sixteen high-need parishes are urban; the rest are rural. These parishes, or any of the other top-ranked high need parishes, would be good locales for initial investments in satisfying unmet needs for transportation in Louisiana.

Parishes Without Rural Transportation Services

Next, we will want to compare the service areas of existing public and human service transportation operations with the areas of highest transportation needs to determine if there are high need areas that are mostly unserved by the existing transportation systems.

Figure 2.4.11 shows the rural parishes in Louisiana that are not served by public transit systems (these parishes are shaded black). The northeastern area of the state, a problem area in terms of unemployment rates and welfare dependency, is almost completely without transit service (with the exception of Madison Parish). This will present a serious problem if there is ever any kind of statewide effort to move welfare recipients to permanent employment. Public transportation, especially rural public transportation, needs to be an integral part of any successful welfare reform program.

Iberia, East Carroll, and Richland are rural parishes without transit services that are among the highest need parishes in terms of the combination of transit dependency needs and welfare to work needs. Morehouse Parish, another rural parish without transit services, is in the second highest need quartile. These four parishes, shown in Figure 2.4.12, would certainly be among those areas in Louisiana where the next investments in public transit services could usefully be employed.

Table 2.4.11. Combination of Welfare to Work Needs Rankings and Transportation Need Ranking

Parish Name	Welfare to Work Combined Needs Ranking	Transportation Needs Combined Total Ranking	Combination of W-t-W and Trans. Need Rankings
ACADIA	275	205	480
ALLEN	396	425	821
ASCENSION	286	272	558
ASSUMPTION	208	252	460
AVOYELLES	369	230	599
BEAUREGARD	493	527	1020
BIENVILLE	337	371	708
BOSSIER	356	397	753
CADDO	214	205	419
CALCASIEU	329	288	617
CALDWELL	473	465	938
CAMERON	488	571	1059
CATAHOULA	371	388	759
CLAIBORNE	316	353	669
CONCORDIA	315	327	642
DE SOTO	279	314	593
EAST BATON ROUGE	250	293	543
EAST CARROLL	265	250	515
EAST FELICIANA	339	399	738
EVANGELINE	347	212	559
FRANKLIN	398	285	683
GRANT	409	415	824
IBERIA	220	235	455
IBERVILLE	257	331	588
JACKSON	419	383	802
JEFFERSON DAVIS	318	312	630
JEFFERSON	234	285	519
LA SALLE	425	450	875
LAFAYETTE	303	281	584
LAFOURCHE	301	361	662
LINCOLN	354	364	718
LIVINGSTON	363	368	731
MADISON	323	299	622
MOREHOUSE	318	285	603
NATCHITOCHES	314	337	651
ORLEANS	61	124	185
OUACHITA	290	232	522
PLAQUEMINES	265	484	749
POINTE COUPEE	303	295	598
RAPIDES	330	279	609
RED RIVER	389	301	690
RICHLAND	261	268	529
SABINE	416	358	774
ST. BERNARD	287	327	614
ST. CHARLES	368	322	690
ST. HELENA	431	353	784
ST. JAMES	165	243	408
ST. JOHN THE BAPTIST	270	272	542
ST. LANDRY	161	133	294

Table 2.4.11. Combination of Welfare to Work Needs Rankings and Transportation Need Ranking
(continued)

Parish Name	Welfare to Work Combined Needs Ranking	Transportation Needs Combined Total Ranking	Combination of W-t-W and Trans. Need Rankings
ST. MARTIN	376	305	681
ST. MARY	125	238	363
ST. TAMMANY	420	335	755
TANGIPAHOA	319	209	528
TENSAS	346	355	701
TERREBONNE	232	313	545
UNION	481	433	914
VERMILION	347	346	693
VERNON	451	482	933
WASHINGTON	275	229	504
WEBSTER	304	245	549
WEST BATON ROUGE	344	339	683
WEST CARROLL	389	337	726
WEST FELICIANA	321	484	805
WINN	411	424	835

Figure 2.4.10 Placeholder

Figure 2.4.11 Placeholder

Figure 2.4.12 Placeholder

Conclusions

There are portions of Louisiana that have high needs for public transit services but have no transit service at all at this time. The northeastern corner of the State and the central area of Louisiana are likely to present the greatest needs for transit in the near future. The combination of high unemployment and high concentrations of welfare-dependence found in these areas will often require a coordinated, multi-parish effort, if these problems are to be addressed. Unfortunately, the vast majority of the jobs created in Louisiana are in the southeastern part of the state, in the urbanizing areas between Baton Rouge and New Orleans. Long-distance (perhaps even interstate) transit may be the most feasible solution for finding employment for persons in the northeastern area of the state.

2.5. The Demand For Transportation In Louisiana's Rural Parishes

Introduction

In a previous section, we examined the relative transportation needs in Louisiana's parishes. Needs can be thought of as relative expressions or indicators of potential transit ridership; when needs are quantified, they are usually done so in terms of the number of individuals in need. Projections of demand provide estimates of the **numbers of trips** expected to be consumed under certain conditions. Demand projections are thus more precise in a mathematical sense than are expressions of relative need (although it must be remembered that the demand estimates are still only estimates).

Demand models are useful "paper and pencil tools" for predicting expected demands under varying conditions, thus eliminating the need to find the level of demand by actually implementing transportation services and varying the service components. The fundamental purpose of demand analysis is to guide investment decisions: how many vehicles to buy, how many drivers to hire, and how many hours these drivers should work. Decisions on these issues obviously have significant cost consequences. Serious errors on such decisions can be quite detrimental to transportation operators.

Methods used to project demand in various communities range from subjective estimates to gap analysis, to transportation surveys, to aggregated estimates, to comparisons of similar systems, to simulation models, and to demonstration services. At both ends of this spectrum, the projective techniques could not really be classified as "models" in the strict sense of the term.

Demands for transportation service in Louisiana's rural parishes will be predicted using the Ecosometrics' transit demand models for rural transportation services calibrated with data from systems in other rural communities. Using these models, it is possible to produce preliminary estimates of demand for the agency and rural transit services.

We have found that the demand for rural transit service is highly dependent upon the amount of service available (which can be expressed as bus miles of service per month). The demand model predicts patronage on a local parish system as a function of:

- *service levels and operating characteristics of the transportation systems:* reservation time, fares, and bus miles;
- *all types and amounts of transportation services provided in the area:* the competition from other bus systems or taxis; and
- *the characteristics of the population to be served:* the number of persons who qualify eligible users on the system.

The specific format of the model is as follows:

$$RTPASS/M = 10^{-1.879} \times BMILES^{1.098} \times RESTIME^{-0.217} \times HIPROBPOP^{0.194}$$

where:

RTPASS/M = the number of round-trip passengers per month for the system (the demand)

BMILES = the total vehicle miles per month for all vehicles of the system (the amount of service provided)

RESTIME = the average time in days required between a call for service and the time a vehicle arrives

HIPROBPOP = the number of persons in the parish (expressed in hundreds) who are *the likely users of the system*, usually defined as the poor plus the elderly who are not poor (except when there are restrictions on who may use the system, the number of persons in the service area who are eligible for the service should be used.)

The predicted monthly demand for trips will be calculated for each individual parish.

Applying The Model

Our demand model was applied to the 41 exclusively rural parishes in Louisiana, and to the nonurbanized portions of 21 other parishes that have both urban and rural portions, in order to identify potential areas of unmet travel demands; Jefferson and Orleans Parishes were not included. In parishes with existing rural transportation services, the actual miles of service their systems now provide was used to project their potential total trip demands. For parishes currently without rural transit services, we estimated their demands for service based on the expected number of trips if they provided the national average of miles of service now provided by rural transit systems across the country.

In areas where transit service is currently provided, the number of annual trips now taken on each system was subtracted from the estimated number, providing us with an estimate of unmet needs. Urban parishes were excluded from the calculations, as the demand model is not designed for use with urban general public transit systems.

Results Of The Analysis

Ranking parishes according to the predicted number of unserved passenger trips (predicted total trips minus trips now provided) produced the results shown in Tables 2.5.1 and 2.5.2 and Figure 2.5.1.

Table 2.5.1 Unserved Transit Demand, Rural Louisiana Parishes

Parish	Predicted Demand	Actual Trips	Unserved Trips	Unmet Demand Rankings
Acadia Parish	141,622	50,966	90,656	15
Allen Parish	41,065		41,065	34
Ascension Parish	140,408	37,113	103,295	12
Assumption Parish	43,761	18,919	24,842	44
Avoyelles Parish	92,620	30,329	62,291	24
Beauregard Parish	59,418		59,418	28
Bienville Parish	28,998	24,726	4,272	57
Bossier Parish	64,611	4,253	60,358	26
Caddo Parish	144,430		144,430	6
Calcasieu Parish	141,777		141,777	7
Caldwell Parish	14,938	7,972	6,966	56
Cameron Parish	12,308	8,893	3,415	58
Catahoula Parish	17,890		17,890	51
Claiborne Parish	32,077	18,430	13,647	54
Concordia Parish	39,769	18,715	21,054	47
De Soto Parish	50,619	13,757	36,862	37
East Baton Rouge Parish	116,465		116,465	11
East Carroll Parish	16,079		16,079	52
East Feliciana Parish	34,848	6,806	28,042	42
Evangeline Parish	74,244	13,012	61,232	25
Franklin Parish	43,991		43,991	33
Grant Parish	31,139		31,139	38
Iberia Parish	178,715		178,715	5
Iberville Parish	65,272		65,272	23
Jackson Parish	27,026		27,026	43
Jefferson Davis Parish	64,426	12,605	51,821	30
La Salle Parish	22,271		22,271	45
Lafayette Parish	97,853		97,853	14
Lafourche Parish	221,559	25,972	195,587	3
Lincoln Parish	93,330	27,471	65,859	22
Livingston Parish	129,555	27,670	101,885	13
Madison Parish	21,995	22,732	-737	60
Morehouse Parish	69,274		69,274	21
Natchitoches Parish	84,038	26,044	57,994	29
Ouachita Parish	88,794	28,984	59,810	27
Plaquemines Parish	28,776		28,776	41
Pointe Coupee Parish	44,197	15,205	28,992	39
Rapides Parish	127,821		127,821	9
Red River Parish	14,702	24,185	-9,483	61
Richland Parish	39,856		39,856	35
Sabine Parish	44,465		44,465	32
St. Bernard Parish	2,906		2,906	59
St. Charles Parish	18,901		18,901	50
St. Helena Parish	15,144		15,144	53

Table 2.5.1 Unserved Transit Demand, Rural Louisiana Parishes (*continued*)

Parish	Predicted Demand	Actual Trips	Unserved Trips	Unmet Demand Rankings
St. James Parish	38,884	98,735	-59,851	62
St. John the Baptist Parish	84,648		84,648	18
St. Landry Parish	233,457	39,642	193,815	4
St. Martin Parish	102,102	12,593	89,509	17
St. Mary Parish	144,699	5,797	138,902	8
St. Tammany Parish	240,868		240,868	1
Tangipahoa Parish	248,802	39,266	209,536	2
Tensas Parish	10,502		10,502	55
Terrebonne Parish	89,853		89,853	16
Union Parish	38,729		38,729	36
Vermilion Parish	120,168	36,248	83,920	19
Vernon Parish	142,288	23,431	118,857	10
Washington Parish	102,512	18,723	83,789	20
Webster Parish	97,639	51,452	46,187	31
West Baton Rouge Parish	19,638		19,638	48
West Carroll Parish	19,467		19,467	49
West Feliciana Parish	21,102		21,102	46
Winn Parish	28,991		28,991	40
<hr/>				
TOTALS	4,668,302	790,646	3,877,656	
<hr/>				

Table 2.5.2 Unserved Transit Demand, Rural Louisiana Parishes by Rank

Parish	Predicted Demand	Actual Trips	Unserved Trips	Unmet Demand Rankings
St. Tammany Parish	240,868		240,868	1
Tangipahoa Parish	248,802	39,266	209,536	2
Lafourche Parish	221,559	25,972	195,587	3
St. Landry Parish	233,457	39,642	193,815	4
Iberia Parish	178,715		178,715	5
Caddo Parish	144,430		144,430	6
Calcasieu Parish	141,777		141,777	7
St. Mary Parish	144,699	5,797	138,902	8
Rapides Parish	127,821		127,821	9
Vernon Parish	142,288	23,431	118,857	10
East Baton Rouge Parish	116,465		116,465	11
Ascension Parish	140,408	37,113	103,295	12
Livingston Parish	129,555	27,670	101,885	13
Lafayette Parish	97,853		97,853	14
Acadia Parish	141,622	50,966	90,656	15
Terrebonne Parish	89,853		89,853	16
St. Martin Parish	102,102	12,593	89,509	17
St. John the Baptist Parish	84,648		84,648	18
Vermilion Parish	120,168	36,248	83,920	19
Washington Parish	102,512	18,723	83,789	20
Morehouse Parish	69,274		69,274	21
Lincoln Parish	93,330	27,471	65,859	22
Iberville Parish	65,272		65,272	23
Avoyelles Parish	92,620	30,329	62,291	24
Evangeline Parish	74,244	13,012	61,232	25
Bossier Parish	64,611	4,253	60,358	26
Ouachita Parish	88,794	28,984	59,810	27
Beauregard Parish	59,418		59,418	28
Natchitoches Parish	84,038	26,044	57,994	29
Jefferson Davis Parish	64,426	12,605	51,821	30
Webster Parish	97,639	51,452	46,187	31
Sabine Parish	44,465		44,465	32
Franklin Parish	43,991		43,991	33
Allen Parish	41,065		41,065	34
Richland Parish	39,856		39,856	35
Union Parish	38,729		38,729	36
De Soto Parish	50,619	13,757	36,862	37
Grant Parish	31,139		31,139	38
Pointe Coupee Parish	44,197	15,205	28,992	39
Winn Parish	28,991		28,991	40
Plaquemines Parish	28,776		28,776	41
East Feliciana Parish	34,848	6,806	28,042	42
Jackson Parish	27,026		27,026	43
Assumption Parish	43,761	18,919	24,842	44

Table 2.5.2 Unserved Transit Demand, Rural Louisiana Parishes by Rank
(continued)

Parish	Predicted Demand	Actual Trips	Unserved Trips	Unmet Demand Rankings
La Salle Parish	22,271		22,271	45
West Feliciana Parish	21,102		21,102	46
Concordia Parish	39,769	18,715	21,054	47
West Baton Rouge Parish	19,638		19,638	48
West Carroll Parish	19,467		19,467	49
St. Charles Parish	18,901		18,901	50
Catahoula Parish	17,890		17,890	51
East Carroll Parish	16,079		16,079	52
St. Helena Parish	15,144		15,144	53
Claiborne Parish	32,077	18,430	13,647	54
Tensas Parish	10,502		10,502	55
Caldwell Parish	14,938	7,972	6,966	56
Bienville Parish	28,998	24,726	4,272	57
Cameron Parish	12,308	8,893	3,415	58
St. Bernard Parish	2,906		2,906	59
Madison Parish	21,995	22,732	-737	60
Red River Parish	14,702	24,185	-9,483	61
St. James Parish	38,884	98,735	-59,851	62
<hr/>				
TOTALS	4,668,302	790,646	3,877,656	

Placeholder for Figure 2.5.1

Current Service Levels in High Demand Parishes

Five of the ten rural parishes with the most unserved transit demands were served by transit systems. They are Tangipahoa, St. Landry, Lafourche, Vernon, and St. Mary.

Among the top ten rural parishes in terms of projected demand, five – St. Tammany, Iberia, Caddo, Calcasieu, and Rapides – do not now have nonurbanized transit services. The parish with the highest demand, St. Tammany, has no rural transit operator to serve the projected demand of nearly 250,000 passenger trips.

Current Level of Service

Of the ten parishes with the highest demands that are served by transit systems, the systems provide, on average, only 18 percent of the trips predicted by the demand model. In addition, there are only eight parishes (Webster, Madison, St. James, Red River, Cameron, Bienville, Caldwell, and Claiborne) where the existing transit system is providing more than 50% of the estimated demand.

Level of Service in Relation to Demand Projections

Of the over 1,123,000 potential passenger trips predicted for the top five rural parish populations, more than 1,018,000 remain unserved. Of the more than 4.1 million potential passenger trips predicted for rural parishes statewide, nearly 3.5 million remain unserved. Even if the model were overstating the demand to some degree, it is clear that more effort needs to be devoted to the task of meeting rural transit demands in Louisiana.

This conclusion is supported by considering the number of vehicle miles divided by the population of the service area, a simple measure of the level of transit provided. For all of the rural transit systems in the nation, the average figure is 7.07 miles per person. For the State of Louisiana, the figure is 2.94 miles per person, less than half of the national average.

Implications Of The Demand Projections And Needs Analyses

Highest Priority Areas

When the unmet demand rankings generated by the demand models described above are combined with the previous rankings of transportation needs – the transportation needs data rankings and the potential welfare to work transportation rankings - the composite result is shown in Figure 2.5.2. The fifteen highest need areas, shown in black, include the parishes of St. Landry, Caddo, St. Mary, Iberia, Acadia, Tangipahoa, Washington, East Baton Rouge, Ascension, St. John the Baptist, Terrebonne, Lafayette, Ouachita, Rapides, and Richland. Of these parishes, those currently without transit service – Caddo, Iberia, East Baton Rouge,

Richland, Rapides, Lafayette, Terrebonne, and St. John the Baptist – would appear to represent the highest priority for immediate action.

Potential for Regional Approaches

In terms of regional approaches, the Evangeline (South Central) region of the state, in addition to the rural areas surrounding the New Orleans Metropolitan Statistical Area, should be seen as the highest priority. Areas such as these, where poverty and unemployment are significant issues for contiguous parishes, and where there is little being done in neighboring areas, are strong candidates for regional transit solutions. A multi-parish transit system serving the many large-scale employment centers in that region (such as the Lafayette General Medical Center, McDermott in St. Mary, and the major food-processing operations in Iberia Parish) could provide access to thousands of jobs and opportunities.

A similar situation exists in the North Delta (northeast) region of the state. This is an area of high unemployment and welfare dependence, and almost completely lacks transit service. The demand models may be understating the needs of this region to some extent, as it is sparsely populated, and perhaps undercounted by the Census and other demographic measures. A regional transit system linking outlying parishes with the Monroe area, and to other outlying job centers such as the International Paper Mill and Ditto Apparel in Bastrop, or catfish farms in Franklin Parish, could provide the kind of access needed to address issues of poverty and unemployment.

Placeholder for Figure 2.5.2

2.6. Perceived Transit Needs

The findings presented in this section are based on information provided by 21 FTA Section 5311-funded nonurbanized public transit operators and 16 other private transit operators who responded to a survey on current and near future (five years) community transit needs. The surveys were sent by fax to all 31 Section 5311 transit systems operating in Louisiana and to a random sample of 50 other transit providers funded in part with public funds other than FTA Section 5311. A copy of the survey instrument and a transcription of responses is presented in Appendix A.

The survey consisted of seven open-ended questions and a comment section. The viewpoints expressed by the respondents are summarized question by question in this section.

Question 1. Do you feel that additional transportation services beyond those now available are needed in your parish?

A substantial majority of the respondents feel additional transportation services beyond those now available in their parish are needed. Transit operators cite insufficient resources and a growing client base as the primary reasons why additional transportation services are needed in their parishes.

Constraints to providing more transportation identified by the respondents include:

- 1) not enough funding to hire drivers at a decent salary,
- 2) not enough vehicles or seating—reservation requests exceed capacity,
- 3) not enough funding to pay for expanded-hours and weekend operations,
- 4) low population density and natural features controlling roadway geographic configurations necessitating long (e.g., costly) trips,
- 5) inadequate or absence of inter-parish service especially from rural and suburban areas to urbanized areas which are essentially regional service centers where the services and jobs are located,
- 6) increasing clientele more and more people needing service including the elderly and Medicaid clients, and
- 7) new workers needing transit to get them from home to work and back.

Inadequate funding precludes expanding vehicle fleets and extending operating hours and days of operation to meet the demand created by people in today's society which is becoming more diverse in terms of home to work commute and work hours. Workers are no longer confined to 8 to 5 jobs; primary job opportunities for welfare reform clients are in the service and retail sectors which typically operate during non-traditional office hours.

The additional transportation service opportunities exist in the form of new and expanded demand markets based on trip type caused by:

- demand for trips to training and jobs both inside and outside the parish of residence,
- demand for trips for medical services including Medicaid, and
- demand to meet new opportunities for post-secondary education program participants attending vocational schools and colleges or universities and transportation for people who do not have a car or access to a car.

Several respondents indicated there was a need to expand days and hours of operation which in turn will require more labor and exhaust vehicles more frequently. One respondent indicated that although dialysis treatment was available for three shifts a day, transportation service could only be provided for two.

Unemployment continues as a problem in rural areas due to a lack of reliable transportation which could take people from their homes in rural areas to jobs in suburban and urban areas.

Public transit services in parishes with urbanized systems have limited coverage within the parish and most suburban and rural portions of those parishes have no service at all.

Some parishes have no public transportation. One respondent from a rural, northeast Louisiana parish indicated that there is no public transportation and no taxi service to the people in that parish.

Question 2. Which people, groups or areas are most affected by limited availability of public transportation services in your parish?

The following were identified by the providers as those most affected by the limited availability of public transportation services:

- 1) people receiving job preparation and training,
- 2) people who need to travel outside the parish,
- 3) people who are not likely to drive or have access to a vehicle due to age—the young and the elderly,
- 4) people who are disabled,
- 5) low income people including the unemployed,
- 6) low wage workers—those who have a job but cannot afford to purchase and pay for operating a vehicle,
- 7) workers holding non-traditional hour jobs,
- 8) rural residents with jobs in cities, and
- 9) geographically isolated people in outlying rural areas

People who rely on public transit in rural areas do so primarily because they have no other choice of transportation. They are dependent on public transit due to a condition which precludes them from owning and operating their own private

transportation. They are dependent because of age (both extremes—either youth or maturity), physical or mental infirmity or income (includes both working and non-working people).

Question 3. In what ways do you find out who in your community needs transit?

Agencies take the initiative in several ways to determine who in the community needs transit services. Some agencies conduct surveys to determine who needs transit. Others conduct community needs assessments to determine what can be done to improve or provide service to those in need. Many transportation providers also operate other programs which have clientele in need of transportation services.

Among the ways identified by the providers were:

- 1) requests being telephoned in by people, particularly concerned relatives and family members seeking assistance,
- 2) referrals from physicians and public health and law enforcement agencies,
- 3) word of mouth--talking with people and groups such as the AARP, hospital personnel, Chambers of Commerce, Lions Club, Rotary, etc.,
- 4) publicizing services to the public through the media—press releases, radio PSA, cable television,
- 5) maintaining a high visibility in the community—being in the local newspaper, keeping churches and civic groups aware of our services, and
- 6) surveys and internal assessments.

Agencies also are actively involved with a variety of outreach efforts designed to let the people in the community know who they are and what they do. They develop and maintain a public awareness: by direct contact with other agencies, and with people such as physicians, hospital administrators, health care workers and local government officials, and through presentations to social, civic and religious organizations and by publicizing themselves and their services using press releases, staging news-worthy events, and Public Service Announcements on radio and cable television.

Question 4. Compared to today, how do you think transit needs will change over the next five years?

Most respondents think transit needs will change over the next five years; they think the needs will grow and that public transit will change to become more responsive to the changing needs of people in the community. The expected growth in transit demand is attributable primarily to demographic and environmental policy changes.

Demographically the expected increase in demand will be among the elderly who constitute a primary public transit clientele. The aging of the “baby boomers” combined with increased life expectancy will contribute to a growth in the elderly

population even if the overall population does not substantially increase. The elderly are a transit dependent clientele insofar as they may suffer physical and mental afflictions which preclude them from driving. Further, they will require greater medical care which translates into more medical trips.

People with low incomes will continue to rely on public transportation as will people working for low wages. Continued emphasis of reducing welfare rolls will contribute to the need for public transit as welfare recipients who previously had fewer trip needs will need transportation to and from work and, for working parents, intervening trips for child care.

Strengthening of environmental regulations on vehicle emission abatement, traffic congestion mitigation and constraints on low vehicle occupancy could force motorists to become increasingly dependent on public transportation.

Question 5. In looking ahead over the next five years, who are the people that will need transit service?

In looking ahead, the providers know that people will continue to need transportation to function in society. Those reliant on public transportation include those who do not have access to alternative private transportation, that is anyone who cannot afford to own and operate a private vehicle. The ranks of those meeting transportation dependent status is expected to expand. So, it appears that the same groups of people that are being served by public transit now, will also need transit service in the future and there will be more of them.

The responding transportation providers have a vision of what future needs will be and who will need them. This vision contains images of known demographic evolution and the impact from successful welfare reform programs. The population is changing and becoming more reliant on public transportation.

Question 6. What, if anything, will prevent them from getting transit service?

Insufficient resources to support a transit service will prevent them from receiving the trips they need. Operators almost without exception consider inadequate funding as the primary obstacle which will prevent people from getting the transit service they need. Without funding to keep up with increasing operating cost (e.g. wages, insurance premiums, etc.) and to expand to meet demand which will be growing, those in need will go wanting. Since most public transit riders have limited financial means, alternative financing (e.g., program contracts, grants, local government revenue—preferably a dedicated source, etc.) will be needed to provide the fiscal resources needed to build and operate the system. It is important to remember that some parishes today do not even have a public transit system.

Lack of information about available services. This is especially problematic among people in households without a telephone and elderly people who live alone and are

removed from the mainstream of community information.

The stability of a statewide transit system depends on having a stable source of revenue. None of the public transit systems in Louisiana are supported by a dedicated source of public funding. The financial commitment from the state is limited to an annual appropriation of approximately \$6,000,000 from the Parish Transportation Fund. Of that amount, about \$150,000 or two and one half percent, is allotted to nonurbanized areas.

Question 7. What are the major obstacles or concerns you think need to be addressed in order for transit services to be improved in your parish, both now and in the future?

Coordination, starting at the state level, is needed to get the most from the available financial transportation resources. The state has to commit to building a statewide transit system. The state will need to allocate state-managed transportation resources which contribute to a long term transit system.

Adequate funding to operate a system responsive to people's needs. The system must pay decent wages to drivers and other workers and have reliable vehicles and operate during days and times of day that people need the service.

To build local support and clientele, systems will have to publicize and make people aware that they offer public transportation available to everyone, not just this group or that group. Public transit must become an identifiable entity of its own. These systems will also need to keep local, state and federal elected officials aware of the services they offer and the clientele who avails themselves to those services. Several providers indicated that the public views them as "the Council on Aging" which only provides transportation to senior citizens.

Transit operators must take responsibility to inform and educate the public of their services. Even though a number of programs offer transportation to their clients, they may not be doing enough to inform and educate their clients on the availability of transportation. The general populace may not get any information at all.

Final Comments. If you have any other comments concerning transportation and coordination of transportation services in your parish please share them with us.

"Until there is a coordinated effort at the state level to organize rural transportation, it is very unlikely it will be seen at the parish level." State agencies control state and federal funds used to finance all but the local matching share for public transportation in rural areas. Coordination is a process and to be an effective process it needs to start at the top.

Transportation cannot continue operating on a program by program basis; there

needs to be a comprehensive delivery system responsive to any need that arises. Social and medical service programs are generally run by people with little or no experience in transportation. Rather than operating transportation as an auxiliary component of those programs, a comprehensive transportation delivery system which can be responsive to the needs of all the program clients and the general, non-program supported public should be established. Planning, development and administration of transportation efforts should be the responsibility of the transportation system.

Some are optimistic—“...People are becoming more dependent on the system and it is growing by leaps and bounds. I want to take it as far as we can go and build a transit system to meet the needs of our public.”

Some are not optimistic—“....We have done everything we can to keep the transportation services going in our parish and I feel we are sometimes fighting a losing battle.”

2.7. Inventory and Analysis of Existing Transportation Services

An inventory of all known transportation services was compiled in June 1998 and has been included in Appendix B of this report. The data provided in this section of the report was current as of that date. All transportation providers identified in this inventory were mailed a survey (Appendix C) for the purpose of collecting current information. All Section 5311 rural transit providers returned their surveys.

Of the 100 taxi companies identified and mailed information only 20 returned the survey form. 112 of 266 surveys were returned by “Other” providers. “Other” includes urban public transit services, Section 5310 services, and other state-funded transportation services.

2.7.1 Introduction

The objective of this section is to provide an assessment of the levels and distribution of resources currently available for the provision of non-urbanized transportation services provided by Federal Transportation Administration (FTA) funded programs in Louisiana. This assessment includes providers who participate in the FTA 5310 Elderly and Disabled and the Section 5311 Non-Urbanized General Public Transportation programs.

The data were obtained from grant applications and provider reports submitted to the Louisiana Department of Transportation and Development (DOTD). In cases where DOTD did not have data for an agency’s total fleet, the records were supplemented with data from the provider.

All population data is taken from the 1990 U.S. Census of Population with the persons below poverty used as a estimate of the population most likely to have a need for public transit and persons with a mobility limitation used as an indication of the need for handicapped accessible vehicles.

The assessment is divided into two resource categories: Vehicle Inventory and Operating Funds.

Vehicle Inventory—the vehicle inventory compiled includes all vehicles (regardless of funding source) that were in operation by agencies participating in the FTA 5310 and 5311 programs as of December 31, 1998. The analysis includes a summary of the quantity, capacity, handicapped accessibility, and age of vehicles in the fleet by parish and agency type.

Operating Funds—the data on operating funds and expenditures was not available for all of the Elderly and Disabled program participants. Rather than use incomplete data the inventory and assessment of operating funds and expenditures was limited to the Section 5311 Non-Urbanized General Public program participants.

The inventory of expenditures was compiled from total transportation operating cost reported to DOTD for the last complete fiscal year (1997-98). The inventory of current FTA funding available for transit operations was compiled from the *Section 5311 Program*

of Projects LA-18-X016 allocation of funds for the current fiscal year (1998-99).

To access the match between the distribution of resources and potential transit needs, the consistency between the distribution of resources and distribution of population by parish were compared on the basis of units per capita, units per persons below poverty and units per persons with a mobility limitation.

2.7.2 Vehicle Inventory

Statewide there were 110 agencies participating in the Section 5310 and the Section 5311 programs combined. FTA support of transportation for the state's non-urbanized population was accomplished through the 5311 Non-Urbanized General Public program. Special needs transportation in both urbanized and nonurbanized areas was accomplished through the Section 5310 Elderly and Disabled program.

There were thirty 5311 Non-Urbanized General Public providers operating in 30 parishes. These 30 parishes account for 57% of the state's non-urbanized population. Thirty additional parishes had at least one FTA Elderly and Disabled provider. Twenty-five of the 30 Section 5311 general public providers were also funded under the 5310 Elderly & Disabled program for a total of 105 E&D program participants.

Fleet Size—The 110 providers operate a total of 739 vehicles with a seating capacity of just under 8,000 seats. This translates into approximately 6 vehicles and 61 seats for every 10,000 persons within the state living below poverty. Table 2.7.1 presents the breakdown of fleet size by provider type.

Table 2.7.1. Statewide Summary of Fleet Size and Capacity

	Provider Type		
	FTA 5311 Non-Urbanized General Public	FTA 5310 Elderly & Disabled*	Total
Providers	30	80	110
Vehicles	237	502	739
Per 10,000 Persons	0.6	1.2	1.8
Per 10,000 Persons Below Poverty	1.8	3.8	5.6
Passenger Seats	2,549	5,441	7,990
Per 10,000 Persons	6	13	18
Per 10,000 Persons Below Poverty	26	56	83

* Excluding those receiving both 5310 and 5311 funding.

The 30 Section 5311 providers operate 237 vehicles with a seating capacity of 2,549 seats to provide non-urbanized general public transit services. For the total area served by a non-urbanized general public provider there are an average of two vehicles and 23 passenger seats for every 10,000 non-urbanized residents.

The average fleet size for 5311 providers was eight vehicles with a low of two in St. Martin and a high of 14 in St. Landry and Bienville. The average seating capacity was 85 seats per agency with a low of 21 in St. Martin and a high of 216 in St. James. A detailed summary analysis of the vehicle fleet and capacities by parish and provider type is provided in Appendix D.

Vehicle Age—the average vehicle age in years from 1999 for the entire fleet was six years with a range of 21 to less than one year old. Over one-third (37%) of the fleet had a current odometer reading of more than 100,000 miles (Table 2.7.2). An additional 29% fall between 50,000 and 100,000 miles with only one-third of the fleet having less than 50,000 miles.

Table 2.7.2. Statewide Summary of Vehicle Age and Mileage Incurred

	Provider Type		
	FTA 5311 Non-Urbanized General Public	FTA 5310 Elderly & Disabled*	Total
Vehicle Age (in years from 1999)			
Average Age	5	6	6
Oldest	17	21	21
Newest	< 1	< 1	< 1
% of Vehicles by Total Miles			
less than 10,000	5%	10%	9%
10,000 to 49,999	32%	22%	25%
50,000 to 99,999	28%	29%	29%
100,000 and Over	35%	39%	37%

* Excluding those receiving both 5310 and 5311 funding.

For certain individual parishes the mileage on fleet vehicles was more critical. Nineteen parishes had over half of their fleet with odometers over 100,000 miles. The highest percentage of vehicles over 100,000 miles for individual parishes was 73% and 71% for DeSoto and West Feliciana Parishes respectively. There were also differences at the parish level between programs. For example, Tangipahoa which had 10% (one vehicle) of its general public fleet and 79% (eleven vehicles) of the non-general public fleet with over 100,000 miles. A detailed summary analysis of vehicle age and mileage by parish and program is provided in Appendix E.

Handicapped Accessibility—67% of the general public fleet and 49% of the Elderly and Disabled fleet was handicapped accessible and equipped with wheelchair lifts. Fifty-five percent of vehicles statewide were accessible. With a statewide population of 163,861 persons with a mobility limitation, this translates into 2.5 vehicles per 1,000 persons estimated to need handicapped accessibility. The combined fleet capacity for wheelchair spaces was 570 or 3.5 seats per 1,000 persons with mobility limitations statewide.

Table 2.7.3. Statewide Vehicle Handicapped Accessibility

	Provider Type		
	FTA 5311 Non-Urbanized General Public	FTA 5310 Elderly & Disabled*	Total
Handicapped Accessibility			
# of Vehicles Accessible	159	247	406
% of Vehicles Accessible	67%	49%	55%
per 1,000 persons with mobility limitation	1.0	1.5	2.5
# of Wheel Chair Spaces	205	365	570
per 1,000 persons with mobility limitation	1.3	2.2	3.5

* Excluding those receiving both 5310 and 5311 funding.

The percentage of fleet vehicle accessible varied by parish. Eighteen parishes had less than 50% of the fleet handicapped accessible and two parishes (Iberia and Morehouse) had less than one third of their fleets accessible. Only six of the 30 general public providers were less than 50% accessible with a low of 33% accessibility in East Feliciana. A detailed summary analysis of vehicle accessibility by parish and program is provided in Appendix F.

Capital Funding—of the total fleet 47 % were purchased under the Elderly & Disabled program and 13 % were purchased under the Non-urbanized General Public program for a total FTA participation in the purchasing of 60% of the vehicles operating. Federal capital interest is maintained in 44% of the total fleet (Table 2.7.4).

Table 2.7.4. Summary of FTA Funding for Vehicle Acquisition

	Provider Type		
	FTA 5311 Non-Urbanized General Public	FTA 5310 Elderly & Disabled*	Total
% of Fleet Purchased through FTA 5310 & 5311 Programs	74%	54%	60%
5310 Elderly & Disabled	33%	53%	47%
Current	25%	39%	35%
FTA interest disposed	8%	14%	12%
5311 Non-Urbanized General Public	41%	1%	13%
Current	30%	0%	9%
FTA interest disposed	11%	1%	4%

* Excluding those receiving both 5310 and 5311 funding.

Seventy-four percent (74%) of the vehicles in the non-urbanized general public transportation provider fleet were purchased through FTA capital funding program (33%—E&D, 41%—General Public). There was a current federal capital interest remaining in 55% of the vehicles in the general public fleet. The parish distribution of vehicles by funding source is provided in Appendix D.

2.7.3 Operating Funds

During the last complete fiscal year, 1997-98, there were 33 parishes participating in the FTA Section 5311 Non-Urbanized General Public Transit Program. The total non-capital expenditures for transportation operations reported for all 33 providers were \$6.5 million (Table 2.7.5). The Section 5311 program funded 38% or \$2.5 million of the total expenditures. The remaining 62% (\$ 4.0 million) was funded through other federal, state and local programs.

Table 2.7.5. Summary of Operating Expenditures and Funding

Parish	% of Population Non-Urbanized	1990 Non-Urbanized % of Population ¹	Total Transportation Operating Expenditures 7/97-6/98 ²	\$ Expended per capita (non-urbanized)	FTA 5311 Operating Funds Allocated 7/98-6/99 ³	% of FTA 5311 Operating Funds Allocated	% of Total State Non-Urbanized Population	Difference between % Funds Allocated and % Population
Acadia ⁴	100.0%	55,882	\$ 332,697	6.0	\$ 0	0.0%	2.8%	-2.8%
Allen	100.0%	21,226	\$ 0	0.0	\$ 0	0.0%	1.1%	-1.1%
Ascension	100.0%	58,214	\$ 217,726	3.7	\$ 66,020	3.4%	2.9%	0.5%
Assumption	100.0%	22,753	\$ 205,457	9.0	\$ 62,272	3.2%	1.1%	2.1%
Avoyelles	100.0%	39,159	\$ 300,514	7.7	\$ 143,199	7.5%	2.0%	5.5%
Beauregard	100.0%	30,083	\$ 0	0.0	\$ 0	0.0%	1.5%	-1.5%
Bienville	100.0%	15,979	\$ 329,219	20.6	\$ 161,913	8.4%	0.8%	7.6%
Bossier	38.0%	32,746	\$ 118,692	3.6	\$ 36,159	1.9%	1.6%	0.2%
Caddo	18.1%	44,868	\$ 0	0.0	\$ 0	0.0%	2.3%	-2.3%
Calcasieu	29.0%	48,832	\$ 0	0.0	\$ 0	0.0%	2.5%	-2.5%
Caldwell	100.0%	9,810	\$ 66,922	6.8	\$ 22,394	1.2%	0.5%	0.7%
Cameron	100.0%	9,260	\$ 64,661	7.0	\$ 36,600	1.9%	0.5%	1.4%
Catahoula	100.0%	11,065	\$ 0	0.0	\$ 0	0.0%	0.6%	-0.6%
Claiborne	100.0%	17,405	\$ 178,263	10.2	\$ 92,621	4.8%	0.9%	3.9%
Concordia	100.0%	20,828	\$ 89,069	4.3	\$ 16,719	0.9%	1.0%	-0.2%
De Soto	100.0%	25,346	\$ 234,372	9.2	\$ 67,478	3.5%	1.3%	2.2%
East Baton Rouge	9.4%	35,765	\$ 0	0.0	\$ 0	0.0%	1.8%	-1.8%
East Carroll	100.0%	9,709	\$ 0	0.0	\$ 0	0.0%	0.5%	-0.5%
East Feliciana	100.0%	19,211	\$ 125,566	6.5	\$ 31,866	1.7%	1.0%	0.7%
Evangeline	100.0%	33,274	\$ 101,545	3.1	\$ 23,429	1.2%	1.7%	-0.5%
Franklin	100.0%	22,387	\$ 0	0.0	\$ 0	0.0%	1.1%	-1.1%
Grant	100.0%	17,526	\$ 0	0.0	\$ 0	0.0%	0.9%	-0.9%
Iberia	100.0%	68,297	\$ 0	0.0	\$ 0	0.0%	3.4%	-3.4%
Iberville ⁴	100.0%	31,049	\$ 104,470	3.4	\$ 0	0.0%	1.6%	-1.6%
Jackson	100.0%	15,705	\$ 0	0.0	\$ 0	0.0%	0.8%	-0.8%
Jefferson	1.5%	6,673	\$ 0	0.0	\$ 0	0.0%	0.3%	-0.3%
Jefferson Davis	100.0%	30,722	\$ 184,802	6.0	\$ 47,324	2.5%	1.5%	0.9%
La Salle	100.0%	13,662	\$ 0	0.0	\$ 0	0.0%	0.7%	-0.7%
Lafayette	21.2%	34,927	\$ 0	0.0	\$ 0	0.0%	1.8%	-1.8%
Lafourche	95.6%	82,050	\$ 284,496	3.5	\$ 96,018	5.0%	4.1%	0.9%
Lincoln	100.0%	41,745	\$ 196,419	4.7	\$ 68,808	3.6%	2.1%	1.5%
Livingston	79.3%	55,940	\$ 204,272	3.7	\$ 56,237	2.9%	2.8%	0.1%
Madison	100.0%	12,463	\$ 144,283	11.6	\$ 50,103	2.6%	0.6%	2.0%
Morehouse	100.0%	31,938	\$ 0	0.0	\$ 0	0.0%	1.6%	-1.6%
Natchitoches	100.0%	36,689	\$ 420,378	11.5	\$ 116,660	6.1%	1.8%	4.2%
Orleans	0.0%	200	\$ 0	0.0	\$ 0	0.0%	0.0%	0.0%
Ouachita	22.4%	31,830	\$ 184,769	5.8	\$ 47,660	2.5%	1.6%	0.9%
Plaquemines	66.7%	17,063	\$ 0	0.0	\$ 0	0.0%	0.9%	-0.9%
Pointe Coupee	100.0%	22,540	\$ 127,463	5.7	\$ 41,572	2.2%	1.1%	1.0%
Rapides	34.8%	45,745	\$ 0	0.0	\$ 0	0.0%	2.3%	-2.3%
Red River	100.0%	9,387	\$ 191,334	20.4	\$ 53,396	2.8%	0.5%	2.3%
Richland	100.0%	20,629	\$ 0	0.0	\$ 0	0.0%	1.0%	-1.0%
Sabine	100.0%	22,646	\$ 0	0.0	\$ 0	0.0%	1.1%	-1.1%
St. Bernard	4.5%	2,968	\$ 0	0.0	\$ 0	0.0%	0.1%	-0.1%
St. Charles	29.9%	12,683	\$ 0	0.0	\$ 0	0.0%	0.6%	-0.6%
St. Helena	100.0%	9,874	\$ 0	0.0	\$ 0	0.0%	0.5%	-0.5%
St. James	100.0%	20,879	\$ 323,630	15.5	\$ 65,010	3.4%	1.0%	2.3%
St. John	100.0%	39,996	\$ 0	0.0	\$ 0	0.0%	2.0%	-2.0%
St. Landry	100.0%	80,331	\$ 280,452	3.5	\$ 65,970	3.4%	4.0%	-0.6%
St. Martin	100.0%	43,978	\$ 73,582	1.7	\$ 24,480	1.3%	2.2%	-0.9%
St. Mary	100.0%	58,086	\$ 76,622	1.3	\$ 8,429	0.4%	2.9%	-2.5%
St. Tammany	62.6%	90,422	\$ 0	0.0	\$ 0	0.0%	4.5%	-4.5%
Tangipahoa	100.0%	85,709	\$ 297,823	3.5	\$ 88,308	4.6%	4.3%	0.3%
Tensas	100.0%	7,103	\$ 0	0.0	\$ 0	0.0%	0.4%	-0.4%
Terrebonne	35.9%	34,803	\$ 0	0.0	\$ 0	0.0%	1.7%	-1.7%
Union	100.0%	20,690	\$ 0	0.0	\$ 0	0.0%	1.0%	-1.0%
Vermilion	100.0%	50,055	\$ 218,134	4.4	\$ 82,998	4.3%	2.5%	1.8%
Vernon	100.0%	61,961	\$ 128,444	2.1	\$ 51,591	2.7%	3.1%	-0.4%
Washington	100.0%	43,185	\$ 173,396	4.0	\$ 82,312	4.3%	2.2%	2.1%
Webster	100.0%	41,989	\$ 452,543	10.8	\$ 112,708	5.9%	2.1%	3.8%
West Baton Rouge	65.4%	12,698	\$ 0	0.0	\$ 0	0.0%	0.6%	-0.6%
West Carroll	100.0%	12,093	\$ 0	0.0	\$ 0	0.0%	0.6%	-0.6%
West Feliciana ⁴	100.0%	12,915	\$ 45,084	3.5	\$ 0	0.0%	0.6%	-0.6%
Winn	100.0%	16,269	\$ 0	0.0	\$ 0	0.0%	0.8%	-0.8%
Louisiana	47.2%	1,991,915	\$ 6,477,099	3.3	\$ 1,920,254			

¹U.S. Bureau of the Census, 1990. ²LADOTD Transportation Management Section 5311 – Performance Report.

³Louisiana DOTD Section 5311 Program of Projects LA-18-X016 Category A (additional \$120,271 in Category B to be allocated later). ⁴Agency is no longer funded under 5311 program.

Total per capita transportation expenditures for the total non-urbanized population of the 33 parishes was \$5.3 dollars per non-urbanized person. The individual parish per capita expenditures ranged from highs of \$20.00 and \$21.00 in Red River and Bienville respectively to a low of \$1.00 in St. Mary. Thirty parishes with a non-urbanized population in excess of 200 people received no funding through the Section 5311 program (Table 2.7.5).

For the fiscal year FY 98-99, Acadia, Iberville, and West Feliciana parishes were no longer participating in the 5311 program. The remaining 30 providers reported operating expenditures of \$ 3,043,567 for the first six months of FY 98-99. Based on expenditures budgeted by these 30 providers, the total non-capital expenditures for non-urbanized general public transportation services were expected to be just over \$7 million dollars by the end of the fiscal year. The 5311 funding level for FY98-99 was \$2.04 million or 28% of total expected costs (Table 2.7.5).

The funding levels for FY98-99 were compared on a per capita basis and a percent of the state's non-urbanized population residing within a parish (Table 2.7.5). This is only presented as an assessment of the consistency between the distribution of funding and the distribution of potential non-urbanized transit needs across parishes. Actual fund allocation was based on level of service provided in addition to parish population. As expected the examination of the difference between a parish population as a percent of the total 5311 non-urbanized population and the percent of 5311 funding allocated to each parish reveals some discrepancies between potential needs and funding.

2.7.4 Summary of Inventory Findings

There were 30 providers funded by FTA 5311 and 80 providers funded by FTA 5310 programs. The 30 parishes operating a FTA funded non-urbanized general public transportation system were expected to incur over \$7 million in operating costs for FY 98-99. The FTA funding available for operating cost for FY98-99 was just of \$2 million or 28% of total expected cost. Forty-three percent of the state's non-urbanized population have no FTA general public resources available.

FTA 5310 and 5311 providers operate a combined fleet of 739 vehicles with a seating capacity of just under 8,000 seats; however, the fleet is aging—with 66% of this fleet having over 50,000 miles and over one-third (37%) having over 100,000 miles. While just over half of the total fleet's vehicles are handicapped accessible, 30% of individual parishes have fleets that are less than 50% accessible.

2.8. Service Area Maps

For purposes of analysis of the service areas of public transit service providers in Louisiana, the state was divided into eight study regions using the same boundaries established as planning districts.

Figure 2.8.1 is a composite map of all of the study regions. Figure 2.8.2 depicts Study Region 1. This region includes the parishes of St. Tammany, Jefferson, Orleans, St. Bernard, and Plaquemines. There are no Section 5311 providers operating in this region. Several urban providers operate in the Orleans, Jefferson, and St. Bernard areas.

Figure 2.8.3 is Study Region 2. This region includes the parishes of Washington, Tangipahoa, St. Helena, Livingston, East Feliciana, West Feliciana, Pointe Coupee, East Baton Rouge, West Baton Rouge, Iberville, and Ascension. Six of these parishes operate a Section 5311 service – Washington, Tangipahoa, Livingston, East Feliciana, Pointe Coupee, and Ascension. Urban service is provided in East Baton Rouge.

Figure 2.8.4 is Study Region 3. This region includes the parishes of Assumption, St. James, St. John the Baptist, St. Charles, Lafourche, and Terrebonne. Three of these parishes operate a Section 5311 service – Assumption, St. James, and Lafourche. Terrebonne Parish has a Section 5307 provider (urban).

Figure 2.8.5 is Study Region 4. This region includes the parishes of Evangeline, St. Landry, Acadia, Lafayette, St. Martin, Vermilion, Iberia, and St. Mary. Five of these parishes have a rural public transit operator: Evangeline, St. Landry, St. Martin, Vermilion, and St. Mary. Only Lafayette Parish offers an urban public transit service.

Figure 2.8.6 is Study Region 5. This region includes the parishes of Beauregard, Allen, Calcasieu, Jefferson Davis, and Cameron. Two of these parishes have rural public transit operators: Jefferson Davis and Cameron. There is an urban transit operator in Calcasieu.

Figure 2.8.7 is Study Region 6. This region includes the parishes of Vernon, Rapides, Avoyelles, Concordia, Catahoula, LaSalle, Grant, and Winn. Vernon, Avoyelles and Concordia Parishes have rural public transit operators. Only Rapides Parish has a Section 5307 transit operator.

Figure 2.8.8 is Study Region 7. This region includes the parishes of Caddo, Bossier, Webster, Claiborne, Lincoln, Bienville, Red River, DeSoto, Sabine, and Natchitoches. Eight of these parishes have a rural transit provider. They are Bossier, Webster, Claiborne, Lincoln, Bienville, Red River, DeSoto, and Natchitoches. Urban public transit service is offered in Caddo Parish.

Figure 2.8.9 is Study Region 8. This region includes the parishes of Union, Morehouse, West Carroll, East Carroll, Jackson, Ouachita, Richland, Madison, Tensas, Franklin, and Caldwell. Only three of these parishes offer rural public transportation: Ouachita, Madison, and Caldwell. Urban public transit is also available in Ouachita Parish.

Figure 2.8.10 is a map which illustrates intercity bus routes throughout Louisiana. These routes tie all of the urban areas together. All regions have intercity routes traversing them, although not all parishes have intercity service. Of the 64 parishes in Louisiana, twelve have no intercity bus service. Parishes with no intercity service include: St. Bernard, Plaquemines, Iberville, St. Helena, East Feliciana, St. James, Vermilion, Cameron, Avoyelles, Sabine, Bienville, and Tensas. Of these parishes – Plaquemines, St. Helena, Iberville, Sabine, and Tensas also have no other service available.

Figure 2.8.1 Placeholder - Study Regions Map

Figure 2.8.2 Study Region 1
Placeholder

Figure 2.8.3 Study Region 2
Placeholder

Figure 2.8.4 Study Region 3
Placeholder

Figure 2.8.5 Study Region 4
Placeholder

Figure 2.8.6 Study Region 5
Placeholder

Figure 2.8.7 Study Region 6
Placeholder

Figure 2.8.8 Study Region 7
Placeholder

Figure 2.8.9 Study Region 8
Placeholder

Figure 2.8.10 Intercity Bus Routes
Placeholder

3. Comprehensive Plan

3.1. Assessment of Previous Coordination Efforts in Louisiana

Several Louisiana studies which addressed the need for the development of specific procedures and policies for administering and coordinating transit services among state and federal programs have been conducted. Reviews of four studies (Sunbelt Research Corporation, 1981; The Planning Center, Inc., 1983; Mumphrey et al, 1986; and Urban Systems, Inc., 1989) conducted between 1981 and 1989 presented several common recommendations which follow. Since 1991 four additional coordination studies have been conducted in a collaborative effort with local providers. A review of each of these studies is provided which summarizes each study's goals, implementation procedures, and achievements.

Recommendations from studies conducted between 1981 – 1989 include:

- the need to establish an inter-agency committee to facilitate the coordination of transit services provided by the various state agencies administering transit and social service programs,
- the need to assess total statewide transit needs as an aggregate need rather than the composite of individual needs of sub-population categories, and
- the need for state (i.e., legislative, executive) commitment to provide efficient public transportation.

Prior to 1991, at least two inter-agency committees were established to facilitate coordination among programs. Specific efforts include:

- 1982 Louisiana House of Representatives Concurrent Resolution 187 establishing the Transportation Coordination Committee, an inter-agency committee to encourage and improve coordination of transit services. The committee was established in 1983 and composed of representatives from the Departments of Transportation and Development, Health and Human Resources, Labor, the Louisiana State Planning Council of Developmental Disabilities, and the Governor's Office of Elderly Affairs.
- 1986 Louisiana Senate Concurrent Resolution 5 establishing the Louisiana Special Transportation Commission to develop a method by which technical assistance and communication among state agencies will be enhanced to assure more cost effective programs and maximize the use of special transportation resources. The resolution called for a written report on the committee's findings to be presented to the Senate by December 31, 1986. No record of that report has been located.

While no documentation was found on specific outcomes of these various agreements and committees, it is apparent that they facilitated at least a short term period of information sharing among participating agencies. What they did not accomplish is the development of specific policies or procedures for coordinating transit services on an on-going basis. (Applied Technology Research Corporation, 1991)

Review of:

“Coordinated Transportation Plan”

Published by: Louisiana Department of Transportation and Development,
December 1991

Prepared by: Applied Technology Research Corporation

This study defined the environment of transit services, including what services were currently provided, to whom they were provided, where they were provided, and what resources were available for their provision.

Coordination approaches used or recommended for use in several other states including Alabama, North Carolina and Iowa were reviewed. The review indicated that there were several key approaches to coordination outlined in the programs of the states that are transferable to coordination efforts in Louisiana. These elements include:

- legislative mandate for a Coordinated State Transit Plan,
- dedicated state funding for transit,
- establishment of an on-going interagency transportation review committee to facilitate the cooperation and participation from key state agencies,
- consolidated documentation of the amounts of public funds expended on transit across state and federal programs including standardized accounting methods and measures of efficiency and effectiveness,
- Department of Transportation lead in establishing coordination policy through the administration of FTA funding and the provision of technical support for the development of coordinated transit systems,
- responsiveness to local needs, and
- participation and support from local governing bodies.

The Coordinated Transportation Task Force, which was formed to guide this project effort and provide input into the concerns of agencies and persons involved in public transportation programs, identified several current or potential problems in the delivery of public transit services. The problems identified were:

- rising cost – operating, administrative and capital replacement;
- inefficiencies – low vehicle utilization, segregated services and duplication of efforts both operational and administrative;
- unmet need – geographical areas without service, segments of the population without service and the need for different services;
- administrative burden – extensive personnel, time and resources required to administer grant and reimbursement programs;
- lack of expertise – drivers, management/administration and planning; and
- resource shortages – personnel and funding.

The task force members agreed that some method of increasing efficiency and effectiveness of transit services was greatly needed and that coordination could facilitate the needed improvements.

The implementation plan developed in this report focuses on action needed at the

state level. Components of the plan address relevant policy, administrative and technical issues. The role of state government is viewed as the key to coordination success. The success achieved at the state level will have beneficial effects at the regional and local levels. Further, state level action will set the direction for coordinated efforts and opportunities which will occur at the local level.

Review of:

“Coordinated Transportation Plan, Local Demonstration Project”

Published by: Louisiana Department of Transportation and Development,
December, 1994

Prepared by: Applied Technology Research Corporation

The purpose of the study was to identify opportunities for the coordination of current transit services in a specific local area, identify barriers to coordinating transit services at the local level, identify transferable ideas and practices that could be utilized in other local areas of the state, and develop recommendations for effecting coordination of local transit services throughout the state.

Lafourche Parish was selected as the demonstration site for this study. To include consideration of coordination opportunities on a regional basis, the study was expanded to include the surrounding parishes of Assumption and Terrebonne. This selection was based on three selection criteria:

- 1) the willingness of the Section 5311 provider to serve as the coordination facilitator,
- 2) the participation of at least one other Section 5310 and/or Section 5311 operator within the parish or across multiple parishes; and
- 3) the willingness of local match provider(s) to participate in the demonstration project.

Lafourche Council on Aging (a Section 5311 and 5310 recipient) and the Lafourche Association for Retarded Citizens (Section 5310 recipient) agreed to participate in the project. Both agencies served on the Coordinated Transportation Task Force during the first phase of the coordination plan development and were familiar with the intent of the project.

Local opinions and issues regarding public transportation in the region were obtained through the use of a telephone survey which was administered to the residents of Lafourche and Terrebonne parishes. The survey was devised to identify the general attitudes of area residents toward public transportation. At the time of the survey administration there were at least 20 agencies in the area providing local and/or regional transportation services yet 56% of respondents said there were no public transportation services available in the area. The overall percent of respondents currently using public transportation services was low (9%). The indication is that while respondents did not necessarily see a personal need for public transportation, they did feel that there was a community need for public transportation and a local responsibility to meet that need.

A local Transit Coordination Council (TCC) was established to solicit input from persons and agencies involved in community development, the provision of transit services, or in need of public transit services. An initial meeting of the TCC was held in September, 1992. The purpose of the meeting was to identify issues, provide commentary on current and future public transit needs for the region, and to solicit participation in the demonstration project. While many concerns or

apprehensions were expressed about the feasibility of coordinating transit services, all agencies agreed the need to improve and increase available transportation services in the area was critical; and that some of these problems could be addressed through coordination.

The next step in this process was to collect and analyze project data. This involved: assembling and assessing the availability and reliability of existing data, collecting supplemental data where necessary and feasible, and synthesizing existing and supplemental data into a description of current system operations. The description of transit services included a vehicle inventory, personnel resources, current travel patterns, vehicle utilization, and transportation cost.

Throughout the project many opportunities for coordinating transit services were identified. Where applicable, project activities initiated to implement coordination strategies were also documented.

The first opportunity identified was to establish a service identity. It was recommended that a separate Lafourche Parish Transportation (identity) be created. All vans should be marked with no reference to the Council on Aging. Public outreach and marketing efforts should be expanded to reach larger segments of the population. A consistent and identifiable logo would help in establishing a recognizable identity. A parish-wide toll-free number should be established for transportation services. This phone number would be answered Lafourche Parish Transportation and would facilitate the coordination of scheduling transportation service among transit zones. And finally, as a part of establishing a service identity, additional training of drivers and other transportation staff is needed to re-enforce the identity and its purposes.

The second opportunity identified was to expand contract services. These services would be aggregated with the general public and other social service groups currently utilizing Lafourche Parish Transportation services. Contract services examined were: Project Independence, Title XIX Non-Emergency Medical Transportation, Lafourche Parish Association for Retarded Citizens, Nicholls State University, and service to New Orleans.

The third opportunity identified was to increase general public ridership and fare collections. Recommendations were to revise the fare schedule, develop a bus pass promotion, expand service to lower Lafourche Parish, and target residents of the Lafourche Housing Authority.

Several “barriers” to coordination of transportation services were identified. Most were not really barriers but were the “way things had always been done” or what people were accustomed to. In the past most social service agencies provided very individualized transportation service to their clients – a personal taxi service. When these agencies tried to change to fixed route or scheduled service there was a resistance on the part of the passengers to accept these changes. There is also the mistaken belief by transit users that transit service should be “free” or that it was

offered free. While certain services may be offered at no cost to the client, the service has never been free. Many clients are able to pay but have come to expect free transportation. This notion can be changed through marketing and client education efforts.

There was the feeling by the social service agencies that only they could provide service for the unique needs of their clients. There was a fear of having a lower priority within a larger system.

While many agencies have developed expertise in meeting their specific agency needs, few agencies have the manpower or expertise available to facilitate a consolidated transit system. Other barriers identified included: lack of data availability and analysis, start-up funds, and the motivation to coordinate transit services. While “coordination” of services is now a requirement of most major federal funding sources, these requirements are general in nature. The burden of developing specific policies and requirements for coordination of services is deferred to the state. Most coordination provisions and policies are generally viewed as voluntary or unenforceable.

Review of

“Coordination Needs Assessment, Status of Transportation Services, Needs Assessment and Coordination Alternatives”

Published by: Tangipahoa Quality of Life Coalition, November 1996

Prepared by: Applied Technology Research and Mary T. C. Johnson

In December, 1995 the Hammond Quality of Life Coalition, Transportation Task Force developed a working paper entitled Pre-Planning Tasks To Be Accomplished which included the Task Force’s mission statement, goals and objectives, and outline for a preliminary feasibility study. Through the initiative of this group, the Louisiana Department of Transportation and Development, Public Transportation Section, agreed to fund a Coordination Needs Assessment of Tangipahoa Parish. Upon completion of the study, the Task Force would have the information needed to make decisions on how to proceed with the transportation program.

The needs assessment was completed in November 1996. In this study the following recommendations were made:

The lead agency model was recommended for the initial startup of the Tangipahoa Parish Transportation System with a possible phase-in to the brokerage model. Two existing providers were recommended for consideration for the lead agency responsibility - the Tangipahoa Voluntary Council on Aging and Transcare.

The Council on Aging was selected as a potential lead agency since it is currently operating as the Section 5311 (public access transportation) provider for the parish. This agency is familiar with and offers transportation to its clients through funding from numerous transportation programs. Potential barriers to this agency’s selection are: lack of staff resources and the fact that this agency’s primary focus is not on the provision of transportation service.

Transcare would also be a good choice for the lead agency role. The selection of this agency was based on the fact that it’s primary focus is the provision of transportation service. Transcare has indicated a willingness to coordinate with other providers. The service operates primarily through funding from Project Independence, therefore they are familiar with reporting and record-keeping required when providing transportation through a social service program. This agency may also have more motivation to provide efficient service to passengers (reduced empty seats) since it is a private for-profit company.

Review of:

“Coordination Assessment Demonstration Project, Phase II Operational Assessment Tangipahoa Parish”

Published by: Tangipahoa Quality of Life Coalition, January 1998

Prepared by: Applied Technology Research and Mary T. C. Johnson

Following the completion of the Coordination Needs Assessment a Phase II Operational Assessment was developed. The objectives of this phase were 1) to prepare an operational assessment of six cooperating, publicly funded transportation providers in Tangipahoa Parish, 2) to prepare recommendations for consideration by the Tangipahoa Transportation Council on specific coordination actions which can be implemented among the six participating providers to improve transportation efficiency, and 3) to prepare recommendations for consideration by the Tangipahoa Transportation Council regarding the establishment of an intraparish fixed route service.

The six agencies initially involved in this operational assessment were the Tangipahoa Voluntary Council on Aging; Transcare, Inc.; Tangipahoa Association of Retarded Citizens; Options, Inc.; New Horizons; and Regina Coeli Child Development (Headstart). Regina Coeli declined to submit information to the study and were removed from the analysis. Tangipahoa Association of Retarded Citizens (TARC) decided not to participate in the project following the Findings Review meeting. These recommendations were made for the remaining agencies:

- Tangipahoa Voluntary Council on Aging and Transcare, Inc. should work together to develop a coordinated system. Also, opportunities for providing transportation to and from work or school should be explored to increase efficiencies of use.
- Options, Inc. should increase efficiency of use of their vehicles.
- New Horizons should consider contracting for transportation service. If TARC would have remained in the project the same recommendation would have been made to them.

3.2. Implementation Plan for Statewide Coordination

3.2.1 Goal

The underlying goal of the coordination process is to develop the most efficient and economical way of providing transportation service to local communities. Improvements to the efficiency and effectiveness of existing transit services in Louisiana are possible. Coordination can facilitate the needed improvements.

Effective coordination begins at the state level. Regional and local coordination is limited unless the foundation has been established by the state. Likewise, state coordination is limited unless the foundation has been established at the federal level. At present there appear to be few obstacles to coordination which can be directly attributable to federal funding agencies.

As administrators of state and federal programs, state agencies can establish and implement policy and administrative procedures needed to support coordination initiatives. If coordination is to succeed, the Inter-Agency Transportation Coordination Committee (IATCC), the Louisiana Department of Transportation and Development (DOTD) and other state departments funding transportation services must take leadership roles.

The success achieved at the state level will have beneficial effects at the regional and local levels. Further, state level action will set the direction for coordinated efforts and opportunities which will occur at the local level.

Coordination is a process. It begins with the current situation; works to correct existing problems which were created due to the lack of coordination and prevents such problems from recurring in the future.

3.2.2 Vision

The Louisiana Department of Transportation and Development, Public Transportation Section, has, as part of a strategic planning process, established goals for attaining a statewide coordinated transportation system. Collectively, these goals portray a vision of the efficient public transportation delivery system DOTD is striving to attain. The components of the desired system envisioned by DOTD are:

Investment—a system supported by state-administered transportation funds directed into an identifiable, IATCC-coordinated and DOTD-directed transportation delivery system;

Stability—a system that has transportation as its primary mission; a system which is stable in terms of funding, vehicles and equipment and personnel; a system which will be here to meet today's needs and here tomorrow to meet future needs when they arise;

Geographic Equity—a system that provides service to people in all geographic areas in the state;

Provider and Patron Equity—a system where providers charge fairly for what they provide and patrons pay for what they get; commitment by public programs to pay for the programs' transportation expenses.

Quality—a system responsive to patrons including: riders, public program funding sources, and the public impacted by the service such as employers and service deliverers; and

Identifiable—a comprehensive system with a uniform identity comprised of urbanized and nonurbanized operators meeting all the above stated characteristics.

This vision provides a “where we want to be” scenario for a well-coordinated public transportation system. A comparison of the current situation to this ideal provides insight into opportunities available to further transportation coordination Louisiana.

3.2.3 Current Situation

The analysis of the data and information compiled and tabulated during the course of this effort yields several key findings which have implications for the recommended opportunities to foster coordination of publicly funded transportation services in Louisiana.

Relevant Findings from Other States

The review of studies from other states indicates that the situation in Louisiana is similar to that encountered elsewhere. Federal funds which are distributed to all states are the fundamental transportation resource used nationwide. Some states have state-funded programs others do not. However, the issue of coordinating federal funds administered by the state at the state level appears common to the states.

The federal government has been diligent in resolving coordination obstacles at the federal level through changes in legislation and regulations. Coordination of resources at the state level is now of primary importance.

Louisiana is on the right track with coordination at the state level. The issue is being addressed in Louisiana by the Inter-Agency Transportation Coordination Committee (IATCC). The IATCC is fostering coordination of transportation resources as directed by the Governor. Under the IATCC, participating state agencies have developed a cooperative spirit, have begun to formulate a common vision and set of goals for transportation services, and, perhaps most importantly, have exhibited a willingness to make transportation work for the benefit of the

state's citizens.

Current Services

Thirty agencies operate non-urbanized public transportation in Louisiana. Most of these agencies serve residents of the parishes where they operate. Twenty-five parishes do not have public transportation services.

Urbanized public transportation is provided in parts of the urbanized parishes of Rapides, East Baton Rouge, Terrebonne, Lafayette, Calcasieu, Ouachita, Orleans, St. Bernard, and Jefferson parishes. There are twelve urbanized parishes with no public transportation in the non-urbanized portions of those parishes.

There is no cooperative service between the urbanized and non-urbanized public systems at this time.

There are about 270 human service agencies that use Federally-funded operations to provide trips, but these trips are primarily provided to only an agency's own clients.

Estimated Demand for Transit Services

Demand for transit service in nonurbanized areas of Louisiana is substantial, and the unmet demand is high. Some parishes have no service at all while other parishes have service which does not meet the demand. Calculations undertaken in this study indicate that public transit providers in Louisiana's nonurbanized areas are only providing an estimated 15 percent of the projected demand.

Five of the ten rural parishes with the most unserved transit demands were served by transit systems; they are: Tangipahoa, St. Landry, Lafourche, Vernon and St. Mary. Among the top ten nonurbanized populations in terms of projected demand, five (St. Tammany, Iberia, Caddo, Calcasieu and Rapides) do not have transit service for the nonurbanized portions of the parish. The parish with the highest demand, St. Tammany, has no nonurbanized transit operator to serve the projected demand of nearly 250,000 passenger trips per year.

Of the ten parishes with the highest demands that are served by nonurbanized transit systems, those systems provide on average only 18 percent of the trips predicted by the demand model. In addition, there are only eight parishes (Webster, Madison, St. James, Red River, Cameron, Bienville, Caldwell and Claiborne) where the existing transit system is providing more than 50 percent of the estimated demand.

Of the over 1,123,000 potential passenger trips predicted for the top five rural parish populations, more than 1,018,000 remain unserved. Of the more than 4.7 million potential passenger trips predicted for rural parishes statewide, nearly 3.9 million remain unserved. Even if the demand model were overstating the potential travel demands to some degree, it is clear that much more effort needs to be devoted to the task of meeting rural transit demands in Louisiana.

This conclusion is supported by considering the number of vehicle miles divided by the population of the service area, a simple measure of the level of transit provided. For all of the rural transit systems in the nation, the average figure is 7.07 miles per person. For the State of Louisiana, the figure is 2.94 miles per person, less than half the national average.

The demand for transit service is expected to increase. Demographic trends, particularly the aging of America, are favorable to increased demand for transit. Data provided by the Governor's Office of Elderly Affairs indicates that 15.4 percent of the population or 641,510 Louisiana residents were age 60 or older in 1990. By the year 2020, the number of people in Louisiana age 60 or older is expected to increase to 1,135,030 which will represent 23.2 percent of Louisiana's population. The number of people 85 years of age or older will more than double by the year 2020 (from 43,230 in 1990 to an estimated 93,970 in 2020).

Welfare reform programs will also contribute to increased transit demand for training and work related trips among low-wage earners who will likely be employed in the service sector which operates at expanded hours of operation.

Recent research indicates that nonurbanized public transportation systems can have substantial economic benefits on the communities within which they operate. The economic influence rendered by rural transportation appears dependent on: features of rural economies, features of the rural transit systems, and the types of trips for rural riders. Settings within which rural transportation systems expected to yield the greatest economic impact are those: 1) which provide rural commuters with access to jobs either in the rural areas or towns and cities, 2) which have a service or manufacturing economic base rather than an agricultural or natural resource base, 3) which have substantial economies of scale offered by transportation services to major activity centers such as a regional airport, medical centers or outlet malls, 4) which focus service on education, job training, or other "human investment" programs, 5) which serve expanding retirement and/or tourism communities, 6) which provide cost-effective access to public services, health services and shopping for rural, often older, people with limited transportation options, and 7) where environmental or traffic congestion costs appear to be appreciable (Burkhardt et al, 1998)

Perceived Needs

A substantial majority of the transportation providers responding to a survey feel additional transportation services beyond those now available in their parish are needed. Transit operators cite insufficient resources and a growing client base as the primary reasons why additional transportation services are needed in their parishes.

Inadequate funding precludes expanding vehicle fleets and extending operating hours and days of operation to meet the demand created by people in today's society which is becoming more diverse in terms of home to work commute and

work hours. Workers are no longer confined to 8 AM to 5 PM jobs. Primary job opportunities for welfare reform clients tend to be in the service and retail sectors which typically operate during non-traditional work hours.

Several providers indicated there was a need to expand days and hours of operation which in turn will require more labor and exhaust vehicles more frequently. One respondent indicated that although dialysis treatment was available for three shifts a day, transportation service could only be provided for two.

Unemployment continues as a problem in rural areas due to a lack of reliable transportation to transport people from their homes in rural areas to jobs in suburban and urban areas.

Public transit services in parishes with urbanized systems have limited coverage within the parish and most suburban and rural portions of those parishes have no service at all.

Some parishes have no public transportation. One respondent from a rural, northeast Louisiana parish indicated that there is no public transportation and no taxi service to the people in that parish.

People who rely on public transit in rural areas do so primarily because they have no other choice of transportation. They are dependent on public transit due to a condition which precludes them from owning and operating their own private transportation. They are dependent because of age (both extremes—either youth or maturity), physical or mental infirmity and/or income (includes working and non-working people).

Most providers think transit needs will grow over the next five years and that public transit will change to become more responsive to the changing needs of people in the community. The expected growth in transit demand is attributable primarily to demographic and environmental policy changes.

Demographically, the expected increase in demand will be among the elderly who constitute a primary public transit clientele. The aging of the “baby boomers” combined with increased life expectancy will contribute to a growth in the elderly population even if the overall population does not substantially increase. The elderly are a transit dependent clientele insofar as they may suffer physical and mental afflictions which preclude them from driving. Further, they will require greater medical care which translates into more medical trips.

People with low incomes will continue to rely on public transportation as will people working for low wages. Continued emphasis of reducing welfare rolls will contribute to the need for public transit as welfare recipients who previously had fewer trip needs will need transportation to and from work and, for working parents, intervening trips for child care.

The additional transportation service opportunities exist in the form of new and expanded demand markets based on trip type caused by: trips to training and jobs both inside and outside the parish of residence, trips for medical services including Medicaid, and trips for post-secondary education program participants attending vocational schools and colleges or universities. The public system will provide transportation for all people who do not have a car or do not have access to a car or who otherwise elect to access the system.

Strengthening of environmental regulations on vehicle emission abatement, traffic congestion mitigation and constraints on low vehicle occupancy could shift motorists' attention increasingly to public transportation.

Existing Constraints

Coordination, starting at the state level, is needed to get the most from the available transportation resources. The state has to commit to building a statewide transit system. The state will need to allocate state-managed transportation resources which contribute to a long term transit system.

Inadequate funding precludes expanding vehicle fleets and extending operating hours and days of operation to meet the demand created by people in today's society which is becoming more diverse in terms of home to work commute and work hours. The system must pay decent wages to drivers and other workers and have reliable vehicles and operate during days and times of day that people need the service.

Transit providers will have to publicize their services to inform the public and make people aware that public transportation is available to everyone and not restricted to just one group or another. Public transit must become an identifiable entity of its own. Several providers indicated that the public views them as "the Council on Aging" which only provides transportation to senior citizens.

The general public and community leaders may not be aware of locally available transportation resources and services. Transit operators must take responsibility to inform and educate the public of their services.

3.2.4 Louisiana's Coordination Initiative

Coordination is a process through which improvements to transportation service delivery can be attained. At one extreme is the totally uncoordinated system where each publicly funded program builds and operates a transportation delivery system restricted to that program's clients. A totally coordinated transportation delivery system is one where all public programs support a comprehensive delivery system which meets the transportation needs of clients from all programs and the general public.

Louisiana's placement in the transportation coordination continuum varies within the state. Although Louisiana has yet to reach the ideal situation where all public programs support a comprehensive transportation system, considerable progress has been made at the state level and in a number of communities throughout the state.

This comprehensive plan for coordination of transportation resources in Louisiana is intended:

- 1) to capitalize on the achievements attained by the state thus far, and
- 2) to implement select opportunities designed to demonstrate approaches to meeting the unmet needs through a coordinated statewide transportation system.

Louisiana's Coordination Initiative consists of opportunities based on the study findings which indicate:

- 1) that more can be done with the state administered transportation resources presently available if there is better coordination among state agencies,
- 2) that the state's financial commitment needs to be increased to better meet the demand for transportation services, and
- 3) that select, existing situations provide opportunities for demonstrating the effectiveness of coordinating transportation service funds.

Five opportunities which have the potential for success constitute Louisiana's Coordination Initiative. Two of the five are administrative opportunities and the remaining three are situational opportunities. All of the opportunities are intended to further the development of public transportation service in Louisiana.

Administrative Opportunity

Opportunity 1—an Administrative Opportunity

Meet more of the present unmet need through better coordination of existing state administered resources.

Opportunity 1 Implementation

The Inter-Agency Transportation Coordination Committee (IATCC) is the state-level administrative mechanism to implement transportation coordination in Louisiana. The IATCC is a committee established by Executive Order of the Governor whose membership includes the chief executives of state agencies administering most of the transportation funds in the state budget and the leaders of both houses of the legislature.

Substantial U.S. Department of Transportation, Federal Transit Administration, funds are allocated directly to the larger urbanized transit systems in Louisiana. The urbanized transit providers serve both a key role in the provision of public transportation and as the foundation for expanding service into presently unserved, adjacent non-urbanized areas. Based on these considerations, it is recommended that the membership of the IATCC be expanded to include the President of the Louisiana Public Transit Association (LPTA).

Implementing coordination of transportation in Louisiana will require substantial effort. It will require the departments represented on the IATCC to collectively reassess services they are currently funding. The coordination effort should ensure that current level of services are maintained and seek ways to expand services both within areas currently being served and into areas where service is currently not available.

As a first step in the effort to further coordinate state managed public funds for transportation, the IATCC should review current transportation service agreements and state administered funding of transportation service vehicles on a parish by parish or other service area basis. The purpose of the review is to assess the degree to which coordination has been achieved through past actions, to assess the state agencies' potential for better coordination of resources in the future and to estimate the level of unmet need expected to be satisfied through better coordination. The number of state agency operating and capital agreements within an area and the number of providers involved in those agreements should be documented. Ratios of agreements to providers which are one to one or approach one to one are likely indicative of an area with high coordination potential.

The potential for better coordination and for meeting unmet needs should be established in IATCC-developed coordination plans on a parish by parish or service area basis. These plans will be particularly important in those parishes and service areas where the various state departments have already established program-specific providers or providers who otherwise restrict services to particular client groups or particular places or both. The plans will document the

existing situation in each parish or service area and approaches to get the transportation delivery system in line with current coordination objectives. Since many of the parties involved in situations needing coordination are likely bound by contractual arrangements, a schedule specifying the time needed to meet contractual obligations should be included in each plan. During this coordination transition period, the participating state agencies can resolve existing problems and work to ensure such problems do not recur. The agencies represented on the IATCC should agree to bring any plans for renewal of transportation services or new transportation services before the IATCC for approval.

Opportunity 2—an Administrative Opportunity

Establish state administered funding to support start-up of expanded or transitional transportation services.

Opportunity 2 Implementation

A strong financial commitment will be needed at the state level to expand public transit services and to support transitional efforts among existing systems. Louisiana can meet this need for start-up and transitional funding by increasing the state's public transportation commitment and/or by appropriating revenue from other state sources.

As a start, state agencies should set aside a portion of any new or additional transportation funds for start-up and transitional efforts. This is particularly relevant to DOTD which should consider setting aside increased public transportation funding derived from the Transportation Equity Act for the 21st Century (TEA-21). This would provide existing operations with a stable level of funding and apply new, additional funds to support expanded or transitional operations. The changes in funding procedures should be reflected in the DOTD's state management plans for FTA administered programs.

Little can be expected in the way of meeting unmet transportation demand and need if expanded services are financed at the expense of existing services. State agencies must continue to maintain existing levels of service at the same time start-up and transitional funding will be needed for expanded and better coordinated services.

The initiation of transportation coordination efforts in areas presently served by multiple transportation providers will likely require transitional funding. These funds will be necessary to maintain an appropriate level of fiscal support for existing providers involved with coordination transitions and to finance capital and operational expenses of expanded services by either existing providers or new providers.

Increased state support for nonurbanized areas could come from a change in the amount and distribution of funds allocated for public transportation. The state currently commits \$6,000,000 annually for public transportation support. Of that amount, approximately \$150,000 is allotted to nonurbanized transportation and the remainder distributed among the urbanized systems. Increasing the appropriation such that the amount available to urbanized areas is maintained or increased and a proportional amount is made available to nonurbanized areas would resolve the current geographic inequity of funding between urbanized and nonurbanized areas.

Data from the 1990 U.S. Census indicate that slightly more than half (53%) of Louisiana's population resided within an urbanized area and 47% resided in nonurbanized areas. The state could apply these proportions as a means of providing an equitable level of funding for both urbanized and nonurbanized transit systems. If these proportions were used as the basis for allotting state public

transportation funds, the current \$6,000,000 annual appropriation would need to be increased to approximately \$11,037,735 in order to maintain the amount presently allotted to urbanized areas and to provide a proportionally equitable amount for Louisiana's population in nonurbanized areas. Under the \$11,037,735 appropriation scenario, urbanized areas would continue to receive \$5,850,000 and the remaining \$5,187,735 would be allotted to nonurbanized areas.

Alternative sources of state funds to provide additional support for public transportation should be investigated. A 1998 study by the American Association of State Highway and Transportation Officials (AASHTO) indicates that most states provide direct financial assistance for public transportation. That state financial assistance is derived from a variety of sources including the general fund, transportation fund, sales tax, fuel tax and lottery proceeds. Florida applies a portion of the motor vehicle license tax as a means of funding public transportation. Some states have developed unique funding mechanisms such as Pennsylvania which dedicates state lottery profits to elderly transportation and New Jersey which applies a portion of casino profits to public transportation.

Situational Opportunities

Three situational opportunity scenarios are present in Louisiana as possible coordination implementation subjects for the IATCC; they are:

- 1) build systemic linkages between urbanized transit systems and adjacent nonurbanized areas,
- 2) expand service into nonurbanized areas with relatively high unmet demand and few existing public transportation service providers, and
- 3) implement a comprehensive, parishwide, coordinated public transportation system in those areas which have strong local initiatives.

The research conducted in this study indicates that differential levels of publicly funded transportation services exist geographically within the state and within parishes. The approach to transportation coordination will likewise vary as appropriate to the existing situation as it applies to the status of state and local transportation coordination accomplishments and the availability of existing transportation service delivery resources deployed in a given area.

The following criteria were used to select the situational opportunities presented:

- 1) the opportunity would substantially contribute to the goal of meeting unmet needs;
- 2) the opportunity is geographically representative of similar situations which presently exist in Louisiana; and
- 3) the opportunity has a high likelihood of success.

The three opportunities presented are intended to address:

- 1) geographic inequities in service,
- 2) urbanized and adjoining nonurbanized area linkages, and
- 3) furtherance of coordination in areas driven by a strong local initiative.

Each of these three situational opportunities is both a pilot in that it has never been accomplished in Louisiana and a demonstration in that others will learn from the implementation experience.

The success of each opportunity is dependent on technical assistance and financial assistance and commitment from the state. Each scenario involves a start-up effort. A commitment to support the projects for a period of three years should be made. This amount of time will be needed to measure and assess progress and achievement.

Although the situational opportunities presented vary geographically, the implementation of each opportunity follows a consistent sequence of steps. The following steps apply to each situational opportunity presented.

Step 1. _____ Establish local leadership to oversee and direct the effort.

The IATCC serves as the entity through which state administered transportation program funds are coordinated at the state level. A comparable entity, a local transportation coordination committee, is needed at the local level where publicly funded transportation services operate.

Local leadership is needed regardless of the geographic scope of an effort. The leader may evolve through a local initiative where a prospective transportation provider, political leaders, business leaders or a group of concerned citizens from a municipality or parish approach the state requesting assistance. The IATCC can encourage the development of local leadership by informing local governments and transportation providers of demand estimates and state funding coordination initiatives.

As the lead agency for the IATCC, the Louisiana DOTD should contact parish governments and publicly funded transportation providers annually. The communiqué should provide information regarding existing transportation demand in the parish and existing transportation providers being supported with state administered funds. The recipients of the correspondence from DOTD should also be informed of the need to establish a local transportation coordination committee, the IATCC oversight of state administered funds for transportation services, the need to have a parish or multi-parish coordination implementation plan, and IATCC procedures regarding the eligibility for receiving state administered transportation funds.

The parish governments and transportation providers should be encouraged to form and become part of a local transportation coordination committee as the way to initiate the process of identifying community transportation needs. In addition to representation from the parish government and transportation providers, the committee should include community leaders, representatives from agencies which serve clients in need of transportation, representatives from prospective user groups, local elected officials, and members of the business community. DOTD should support these local efforts through Federal Transit Administration funding for such projects.

Step 2. _____ Prepare a local transportation coordination implementation plan.

A transportation coordination implementation plan should be prepared for each parish or multi-parish service area. Some states such as North Carolina require such plans as a condition for receiving public transportation funding. Each implementation plan would address:

- existing transportation services,
- transportation service needs and demand,
- public funds (amounts by source) being expended on transportation services,
- cost and magnitude of service provided by publicly funded providers,
- coordination achievements,

- how available resources can be better coordinated,
- alternative approaches to meet the existing transportation service demand, and
- proposed budget and alternative means of financing.

Any proposed expanded service, either expansion into an area not presently being served or expansion of service within an area being served, should be required to have an implementation plan. The plans should be developed with oversight and input from the local transportation coordination committee. They would assist in the assessment of local transportation needs and provide recommendations for implementing a coordinated transportation service. The plans should also be presented to the IATCC for review and determination of consistency with IATCC coordination initiatives.

Planning funds administered by state agencies, particularly those represented on the IATCC, should be used to support these planning efforts.

Step 3. Implement the improved or expanded service.

DOTD, with IATCC oversight, should provide the technical assistance and support for implementing transportation coordination plans. Working closely with the local transportation coordination committee and the participating transportation provider or providers, DOTD should fund vehicles and operations and provide assistance in support of personnel training, equipment acquisition, marketing, program administration and monitoring and evaluation.

Opportunity 3—a Situational Opportunity

Build systemic linkages between urbanized transit systems and adjacent non-urbanized areas.

Opportunity 3 Implementation

Few of the parishes where urbanized places are located have public transportation providers serving the nonurbanized populations of those parishes. At present, there are twelve urbanized parishes (Caddo, Calcasieu, East Baton Rouge, Jefferson, Lafayette, Plaquemines, Rapides, St. Bernard, St. Charles, St. Tammany, Terrebonne and West Baton Rouge) with no public transportation in the non-urbanized portion of the parish.

Urbanized and nonurbanized transit systems were established independent of each other and have continued to operate independent of each other. Several opportunities are available to build a transportation delivery system serving both the needs of an urbanized area and the adjacent nonurbanized areas. Although two specific areas have been singled out for discussion, all urbanized areas of the state hold the potential for meaningful urbanized-nonurbanized transit linkages and should be given consideration when implementing this opportunity.

Although opportunities for establishing the desired urbanized-nonurbanized linkages may be present in other geographic areas, the situation for Houma (Terrebonne Parish) and Slidell (St. Tammany Parish) stand out as having few inherent obstacles. Two of these areas (Houma and Slidell) are relatively new in having achieved the requisite population necessary to be designated an urbanized place. Public transit service has been initiated in the Houma urbanized area but not in the Slidell community. Although having a sizable nonurbanized population in the remaining portions of the parishes within which these urbanized areas are located, neither parish has a nonurbanized provider.

As the first step to move forward on this opportunity, DOTD acting on behalf of the IATCC should contact the urbanized transit agencies and metropolitan planning organizations to determine the receptivity to establishing a linked service covering both the urbanized and nonurbanized portions of a parish or set of parishes. In those areas which are receptive to establishing a linked service, DOTD and the respective metropolitan planning organization and/or public transportation provider should prepare an implementation plan which identifies the availability of FTA funding and other state and local funding which could be used to support the prospective linked system.

Opportunity 4—a Situational Opportunity

Expand service and start new service in nonurbanized areas with relatively high unmet demand and few existing public transportation service providers.

Opportunity 4 Implementation

The parishes comprising the northeastern region of Louisiana exemplify this situation. Collectively, the parishes of northeast Louisiana have higher than average transportation need characteristics and extremely limited rural public transportation service.

Only two and one-half of the eleven parishes comprising the northeast region of Louisiana have rural public transportation service. Public transportation in northeast Louisiana is available in portions of the City of Monroe, the western rural portion of Ouachita Parish, and Caldwell and Madison Parishes. No public transportation service is available to the citizens of East Carroll, Franklin, Jackson, Morehouse, Richland, Tensas, Union and West Carroll Parishes and the eastern rural portion of Ouachita Parish.

Three factors contribute to nonurbanized parishes not having a public transportation provider, they are: 1) the absence of a locally driven initiative, 2) the lack of local matching funds to leverage federal transportation program funds, and 3) the lack of state funds to get programs started and keep them going.

Leadership to establish service where there is none now is needed for this opportunity to even get off the ground. That leadership could come from a state entity, a local entity or an existing provider with an interest in expanding service into presently unserved areas. That existing provider may or may not presently be a public transit provider. The existing provider may be providing a programmatic service under contract to a state social service agency. The IATCC should review the existing providers under contract within the northeast Louisiana area and identify those providers who in the judgment of the members of the IATCC have the potential to operate an expanded service to the general public.

The IATCC, through the Louisiana Department of Transportation and Development, should contact elected officials and community leaders in northeast Louisiana and pose the concept of developing a comprehensive region-wide public transportation system. The local interested parties should organize a transportation coordination committee and continue working with the IATCC on the formulation of an implementation plan which would address the issue of start-up funding to finance the capital resources and operations of the expansion of service.

Opportunity 5—a Situational Opportunity

Implement a comprehensive, parishwide, coordinated public transportation system in those areas which have strong local initiatives.

Opportunity 5 Implementation

This opportunity is specifically directed to a parish with a strong local initiative to better coordinate existing transportation services. Although the local initiative criteria may be present in other parishes, Tangipahoa Parish is known to be one such area where local initiative has for several years actively sought to better coordinate transportation resources as a means of providing better transportation service to the citizens within the parish. The Tangipahoa experiences and situation are discussed as being representative of the prerequisite elements for this opportunity.

The initiative toward an improvement of transportation for all parish citizens began through the Tangipahoa Quality of Life Coalition (originally named the Hammond Quality of Life Coalition). The local group approached the Louisiana Department of Transportation and Development for technical assistance. DOTD responded and financed the completion of a needs assessment and an operational assessment of publicly funded transit providers within the parish. The Tangipahoa Transportation Council, formed after the completion of the needs assessment, has continued to pursue implementation of a comprehensive, coordinated public transit system.

Consistent with the recommendations presented in the operational assessment study, two publicly funded providers, the Tangipahoa Voluntary Council on Aging and Transcare, Inc., have collaborated on an implementation plan. The implementation plan calls for the establishment of a new, deviated-fixed-route, intraparish service with feeder routes. Each of the participating providers would continue to meet their obligations specified in their respective contractual agreements involving funds managed by a state agency. With two studies already complete and a consensus of agreement among the respective parties as to what needs to be done, implementation of the plan is the next step.

Due to the existing contractual agreements and operations, some level of service duplication is expected to be encountered during the first year of the new service. During this transitional year when improved coordination linkages are being forged, certain operational components of the existing system which are necessary to meet existing contractual obligations will continue but ultimately they should be absorbed into the coordinated system as service provision and billing arrangements are resolved.

The establishment of the new deviated-fixed-route service will require start-up funding for vehicles and operations. An estimate of the cost for such a service was identified in the operational assessment report. The total cost of the proposed new service will be determined by the unit cost to operate and by the magnitude of the service (number of vehicles in service, hours per day and days per week of

service).

If the opportunity proves successful, linked service with adjacent parishes is a possibility. Coordination among existing providers in Tangipahoa and Washington Parishes and the development of a comprehensive transit system serving the urbanized and nonurbanized areas of neighboring St. Tammany Parish could ultimately lead to a multi-parish, north-shore system serving the citizens of all three parishes.

Summary

Louisiana's Coordination Initiative is based on this study's findings which indicate that:

- 1) more transportation service is possible using available state administered transportation resources if there is better coordination among state agencies,
- 2) the state's financial commitment needs to be increased to meet the unmet demand for transportation services through system transitions and expansions, and
- 3) select, existing situations provide opportunities for demonstrating the effectiveness of coordinating public funds for transportation service.

The opportunities proposed capitalize on Louisiana's transportation coordination achievements and provide for meeting more of the unmet demand through the implementation of two administrative and three situational opportunities which include:

- 1) meet more of the present unmet need through better coordination of existing state administered resources,
- 2) establish state administered funding to support start-up of expanded or transitional transportation services,
- 3) build systemic linkages between urbanized transit systems and adjacent non-urbanized areas,
- 4) expand service and start new service in nonurbanized areas with relatively high unmet demand and few existing public transportation service providers, and
- 5) implement a comprehensive, parishwide, coordinated public transportation system in those areas which have strong local initiatives.

The first two opportunities, which are administrative in character, will be undertaken by the Inter-Agency Transportation Coordination Committee. The departments represented on the IATCC will reassess services they are currently funding and devise approaches to better coordinate publicly funded transportation delivery systems.

The last three opportunities involve specific projects representative of situations present throughout Louisiana. Each is intended to demonstrate how current situations can be enhanced to better meet the transportation needs of Louisiana's citizens.

REFERENCES

- American Association of State Highway and Transportation Officials. 1998. *Survey of State Involvement in Public Transportation 1996*. Standing Committee on Public Transportation, Washington, D.C.
- Applied Technology Research Corporation and J. L. Evans Engineers & Consultants, Inc. 1991. *Coordinated Transportation Plan, Supplement A, Federal Programs Available to Fund Transportation*. Louisiana Department of Transportation and Development, Baton Rouge, LA.
- Applied Technology Research Corporation. 1991. *Coordinated Transportation Plan*. Louisiana Department of Transportation and Development, Baton Rouge, LA.
- Applied Technology Research Corporation and Mary T. C. Johnson. 1996. *Coordination Needs Assessment*. Tangipahoa Quality of Life Coalition, Baton Rouge, LA.
- Applied Technology Research Corporation and Mary T. C. Johnson. 1998. *Coordination Assessment Demonstration Project*. Tangipahoa Quality of Life Coalition, Baton Rouge, LA.
- Applied Technology Research Corporation. 1998. *Second Annual Report of the Inter-Agency Transportation Coordination Committee (IATCC)*. Louisiana Department of Transportation and Development, Baton Rouge, LA.
- Applied Technology Research Corporation. 1998. *Strategic Planning for Coordinated Transportation*. Louisiana Department of Transportation and Development, Baton Rouge, LA.
- Burkhardt, Jon E. and Armando M. Lago. April, 1976. *Methods of Predicting Rural Transit Demand*. Commonwealth of Pennsylvania.
- Burkhardt, Jon E. and Armando M. Lago. March 28, 1990. *Predicting Rural Transit Demand*. Rural Public Transportation Conference for Legal Services, Legal Services Corporation.
- Burkhardt, Jon E., James L. Hedrick, and Adam T. McGavock. 1998. *Assessment of the Economic Impacts of Rural Public Transportation*. Transportation Research Board, National Research Council. National Academy Press, Washington, D.C.
- Center for Systems and Program Development, Inc. 1989. *Best Practices in Specialized and Human Services Transportation Coordination*. U.S. Department of Health and Human Services and U.S. Department of Transportation, Washington, DC.
- Department of Planning, Zoning and Codes. 1998. *Executive Summary, Lafayette Parish Transit Study, Summary of Technical Memorandum No. 1, Status and Market Analysis of Public Transit Services in Lafayette Parish*. Lafayette Consolidated

Government, Lafayette, LA.

Division of Public Transportation. 1995. *Movin' Idaho, Idaho Public Transportation Plan*. Idaho Transportation Department, Boise, Idaho.

Morphy, Makofsky, Mumphrey, Masson, Inc. 1987. *Statewide Transit Plan*. Louisiana Department of Transportation and Development, Baton Rouge, LA.

Price Waterhouse, LLP, Multisystems, Inc. and Mundle & Associates, Inc. 1998. *Funding Strategies for Public Transportation*. Transportation Research Board, Washington, DC.

RLS & Associates, CGA Consulting Services, Inc. 1991. *A Handbook for Coordinating Transportation Services*. Ohio Department of Transportation, Division of Public Transportation, Ohio.

SG Associates, Inc., Urbitran Associates, Inc. and C. M. Research, Inc. 1996. *North Carolina Human Service Transportation Needs Assessment*. Human Service Transportation Council, North Carolina Department of Transportation, Public Transportation Division, Raleigh, NC.

Sunbelt Research Corporation. 1981. *Statewide Assessment of Transportation Needs in Nonurbanized Areas, Louisiana*. Louisiana Department of Transportation and Development, Baton Rouge, LA.

Turner, Patricia A. and Katherine F. Turnbull, Texas Transportation Institute. 1994. *Improving Transit Coordination in Texas*. Texas Department of Transportation, College Station, TX.

Urban Systems, Inc. 1988. *Coordinating Special Transportation Services in Louisiana*. Louisiana Department of Transportation and Development, Baton Rouge, LA.